THE PHYSICAL AND PSYCHOLOGICAL PROBLEMS EXPERIENCED BY THE INTRA UTERINE DEVICE (IUD) USERS AMONG MOTHERS RESIDING IN SELECTED AREAS AT KANNIVADI PRIMARY HEALTH CENTRE IN DINDIGUL DISTRICT.

A DISSERTATION SUBMITTED TO

THE TAMIL NADU DR.M.G.R MEDICAL UNIVERSITY,CHENNAI,

IN PARTIAL FULFILMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

MASTER OF SCIENCE IN NURSING

APRIL-2015

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Mrs.NIRMALA .I

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CERTIFICATE

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THE PHYSICAL AND PSYCHOLOGICAL PROBLEMS

EXPERIENCED BY THE INTRA UTERINE DEVICE (IUD) USERS

AMONG MOTHERS RESIDING IN SELECTED AREAS AT

KANNIVADI

PRIMARY HEALTH CENTRE IN DINDIGUL DISTRICT.

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CHENNAI.

INTERNAL EXAMINER **EXTERNAL EXAMINER**

1. _____ 2._____

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ABSTRACT

"A Study to assess the physical and psychological problems experienced by the Intra Uterine Device (IUD) users among mothers residing in selected areas at "Kannivadi Primary Health Center, in Dindigul District" was undertaken by Mrs.Nirmala. I in partial fulfillment of the requirements for the Degree of Master of Science in Nursing at Sakthi College of Nursing, the Tamilnadu Dr.M.G.R Medical University, Chennai in April 2015.

The Objectives of this study were to,

- To assess the physical and Psychological problems experienced by IUD users.
- To find out the association between physical and psychological problems experienced by IUD users.

Roy's Stress adaptation model was tailored as the conceptual framework for this Study.

This Study was conducted by using **descriptive research design** in the selected areas at Kannivadi Primary Health Center, in Dindigul District. All mothers who use any form of IUD device to prevent conception were considered as the population of the study. 100 samples who use IUD and who fulfilled the criteria were selected through **convenient sampling.** Data from these samples were collected using a semi structured interview schedule and an observational checklist to assess the physical and physiological problems experienced by IUD users.

MAJOR FINDINGS OF THE STUDY

Major findings related to physical problems among IUD users:

Of the various problems suffered by IUD users the following are note worthy. Out of 100 women studied 25(42%) women suffered from burning micturition. 58 (97%) women have suffered from cramping pain. 57(95%)women have suffered from lower abdominal pain. 58 (97%) women have suffered from back ache. 59 (98%)women have had acute onset. Similarly 59 (98%) women have suffered from pain on and off. 44 (73%) women have suffered from dyspareunia. 24(40%) women had irregular menstruation. 40(67%) women suffered from uneasiness. 52 (87%) women suffered from weakness. 38(63%) women have suffered from insomnia. 25(42%) women suffered from loss of weight. 55(92%) women have suffered from excessive vaginal discharge.

This study in assessing the degree of physical problems revealed that 80% of IUD users experienced only a mild physical problem and 20% experienced a moderate physical problem. The physical problems were not severe in any of the subjects.

Major findings related to psychological problems among IUD users :

53 (88%) women have the fear of becoming pregnant even with the IUD. 39 (65%) women never had the fear of IUD entering into abdomen. 40(62%) women have had the fear that IUD may by expelled.

36(60%) women had a feeling of a change in appetite. 57(95%) women have had experienced feeling that they are not as active as before. 44 (73%) women have

experience feeling of declining sexual interest. 30(50%) women have experienced anxiety that they could not sleep properly. 56(93%)women have admitted that they felt angry irrationally. 20(33%) women got angry with their husband for lack of understanding.

There is a significant association between the level of physical problems and their demographic variables such as educational background at $P<0.05$ level and religion at $p<0.01$ level. Hence research hypothesis H1 is retained for educational background and religion among mothers in association.

There was no significant association between level of physical problems among mothers and their demographic variables such as age, occupation, income of family, type of family, area of residence, number of children and duration of IUD usage.

There is a significant association between the level of psychological problems and their demographic variable such as occupation at $P<0.05$ level and religion at $P<0.01$ level. Hence research hypothesis H_2 is retained for occupation and religion among mothers in association.

There was no significant association between level of psychological problems among mothers and their demographic variables such as age, educational background, income of family, type of family, area of residence, number of children and duration of IUD usage.

This study in assessing the degree of psychological problems revealed that 87% of IUD users experienced only mild psychological problems and 13% experienced a moderate psychological problem. The psychological problems were not severe in any of the subjects.

Based on the finding of the study, it is recommended that,

- A similar kind of study can be conducted for a larger group for better generalizability.
- An extensive research can be done focusing on one problem specific to IUD users.
- A comparative study to assess the physical and psychological problems can be done on IUD users.
- A comparative study on the physical and psychological problems experienced by IUD users residing at kannivadi primary health center can be done.

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CHAPTER I

INTRODUCTION

"Some of the least expensive, longest lasting forms of birth control available to women today"

–Catherine Pearson

Family is a well-knit permanent unit of society. Its members are dependent on each other for their health and welfare. Rapid population growth is one of the most important challenges faced by the world today. Large family size adversely affects the health and happiness of each member of the family. Family planning would thus mean planning the size of the family to match with the physical and socio – economic capabilities of the parents and to be conductive to health and welfare of the members of the family.

The population problem is a concern that has gained prominence both in the developed as well as developing countries because of its inter-relationship between health and economic development. Increasing population is creating a continuing gap between India's impressive profile of progress and its gains. To translate the gains of developmental work into improved quality of life, various population control measures are to be universalized.

India was the first country in the world to start "The family planning" program in the year 1953, the term "the family planning" later got changed to "Family Welfare" so as include more issues affecting family and society. The objectives of the family welfare program in India were to stabilize the country's population and improve the health of the family as a whole.

India's population, which crossed one billion in 2008, is projected to reach 1.53 billion by 2050, making it the most populated country in the world. Women of reproductive age group (15-45 years) make up approximately 248 million. The Reproductive and child health (RCH) programme in India promotes and Planned Parenthood through the Government's family welfare program with voluntary use and free choice of contraceptive methods. The current approach in Family planning emphasizes on offering high quality contraceptive service among eligible clients on a voluntary basis. An important component of the program is promoting adequate spacing of births.

The National population policy 2000 has recognized as its immediate objective the task of addressing the unmet need for contraception to achieve the medium term objective of bringing the Total Fertility Rate (TFR) to replacement level of 2.1 by 2010 so as to achieve the long-term goal of population stabilization by 2045. As per (national family health scheme), the contraceptive prevalence rate in India is 56.3%, which varies widely among different states and the unmet need for family planning is high at 13 %(6% for spacing).

Intrauterine device (IUD) TCU 380A is one of the most commonly used reversible methods of contraception among women of reproductive age worldwide. Results of recent studies and literature have effectives, confirmed that intra uterine device provide very effective, safe and long term protection against pregnancy and the health risk associated with the method of negligible.

Contraceptive methods are used to help the women avoid unwanted pregnancies and thus enable family planning as India's present population has exceeded one billion. They include all temporary and permanent measures to prevent pregnancy. Intra uterine device (IUD) TCU380A is one among the most used

temporary contraceptives by women. (IUD TCU380A) stands for intra uterine device which is a form of long lasting reversible birth control that a doctor implants in your uterus. Different kinds can last anywhere from three to ten years and they are over 99% effective at preventing pregnancy. Research shows they are as safe for teen as they are for older women and the American Academy of Pediatrics recently recommended then as an excellent option for adolescents.

IUD TCU380A from Female welfare assistants (FWAs) and Female welfare visitors (FWVs) and those who said the health worker advised them about side effects when to Return, and other related factors were slightly more likely to report having inside effect. The observation of this differences suggests that although many side effects have a physiological basis (e.g., extra menstrual flow, which may be problematic for women who are already experiencing anemia), community, societal, religious, and spousal factors also are in causing women to see these physiological changes as problems. more women reported excessive bleeding than any other side effect, and this was usually accompanied by abdominal pain and often other problems. Among women who received an abortion, depression, frustration, anger, anxiety and dysphoric mood symptoms remained steady or decreased over the 2 years after the procedure.

Intra-uterine device is not a new method of contraception. however in recent years there has been significant improvement in its design and content to obtain maximum efficiency with minimum adverse effects. The intra-uterine devices cause an inflammatory response increasing the number of leucocytes, which destroy the estrogens uptake thus rendering the endometria's enzymes, glycogen metabolism and oestrogen uptake thus rendering the endometrium hostile to implantation. Copper

devices also produce a foreign body reaction. These copper ions disturb a number of enzymatic activities in the endometrium of which the significance is unclear.

Even so a number of sensitive women may present side effects as headache, breast pain and acne. These side effects are always of short duration. The most important side effect which may be the reason for request to remove the IUD TCU380A, is the disturbance of the menstrual cycle. In the beginning it is seen as increased incidence of spotting which later changes to oligomenorrhoea and in 10% of cases to amenorrhoea. Through this method of contraception is widely used, the problems expressed by IUD TCU380A users are divers and do not follow a specific pattern. On the other hand many factors influence the users to see IUD TCU380A usage as problems no more personal but at large to threaten IUD TCU380A usage.

In developing countries the IUD TCU380A is a dominant type of contraception. The pregnancy rate with an inserted IUD TCU380A is reported to be between 1 to 6 per 100 womens/year of use. The expulsion rate is 4 to 18 per 100.

NEED FOR THE STUDY:

"SPACING BIRTH AT LEAST TWO YEARS APART SAVE THE LIVES OF MILLIONS OF INFANTS AND CHILDREN EVERY YEAR"- Rati Suchitra

Health for all reminded a dream to certain extent because women were not made aware of their responsibility towards their own health. Intra uterine device (IUD) TCU380A is one of the most commonly used reversible methods of contraception among women of reproductive age worldwide. Family planning refers to practices that help individuals or births to regulate the intervals between pregnancies to control the time at which births occur in relation to the ages of the couple and to determine the number of children in the family. The current objectives

of the couple and to determine the number of children in the family. The current objectives of the family welfare program in india related to the small family norm is on three themes : “sons or daughters –two will do”, “second child after 3 years “, and universal immunization”.A significant achievement of the family welfare program in national target is to achieve a net reproduction rate of 1 by years 2006,which is equivalent to attaining approximately 2-child norm.

WHO (2010) for national socio-demographic goals to address the unmet needs for basic reproductive and child health service ,supplies and infrastructure. Reduce infant mortality rate to below 30 per 1000 live births. Reduce maternal mortality ratio to below 100 per 100,000 live births. Achieve universal access to information / counseling and services for fertility. Regulation and contraception with a wide basket of choices. In the 2010,instead of 1162 million (116 crores) projected by the technical group on population projections it is imperative that the reproductive age 34 group adopts contraception without available, accessible and affordable. Around 74 percent of the populations live in rural areas in about 5.5 lakhs villages most of which having poor communication and transport. The unmet need for contraceptive services is estimated as 28%.

One of the main reasons that intra uterine devices is under utilized in india is that many health service providers and potential clients lack accurate up to date information about the intra uterine device. It is often found that the advantages are understated. The disadvantages tend to be exaggerated and many myths and misconceptions are prevalent in the community and among the providers too. The high discontinuation rate is due to problems related to provider’s knowledge and skills leading to address these programmatic concerns by improving infrastructure, updating guidelines that include evidence-based practices and increasing the pool of trained

providers and creating awareness among women of reproductive age group about the Intra Uterine Devices.

The only IUDs TCU380A now available on the American market are Alaza's Progestasert (which causes an anti-estrogenic effect) and the newest IUD TCU380A, Para guard, produced by the population Council and GynoPharma,a small "front" corporation set up to avoid legal liability. The Paraguard of a flexible T-shape containing copper collars on both arms and a copper coil along the stem, and is supposedly 'good' for six years. The Progestasert, on the other hand, only function effectively for about one year.

The United States Food and Drug Administration (FDA),which must carefully study birth control methods before releasing them to the market, stated in their Text of required patient Information for IUDs TCU380A that "IUDs TCU380A seem to interfere in some manner with the implantation of the fertilized egg in the lining of the uterine cavity. The IUD TCU380A does not prevent ovulation. Now, the American Academy of pediatrics just announced that is supporting IUDs TCU380A and implants as the first choice for contraceptive use in teens. IUD TCU380A can remain effective for many months once inserted. That means that for a forgetful teen, an IUD TCU380A or implant could be a better choice.

An IUD TCU380A work by releasing small amount of the hormone progestin consistently into the women's body. IUDs TCU380A are placed in the uterus are inserted in to the arm. IUDs TCU380A can work in the long term, lasting for as many as three to ten years.

Jason Saltzman et.al (2014) according to an article published in June (2014) Searle Laboratories, on its Cu-7 intrauterine device states that the action of the IUDs TCU380A would seem to be a simple local phenomenon, that these devices prevent

nidation [implantation] of an already fertilized ovum has been accepted as the most likely mechanism of action. The convenient IUD TCU380A eliminates the daily need to keep track of pills and is effective at preventing pregnancy for long periods of time.

The contraceptive manufactures in their zeal to destroy women's fertility, have not had many good experience with their intra-uterine device. This is not at all surprising in light of the fact that the exact method by which IUDs TCU380A function is not known. There is no question that IUDs TCU380A do not interface with the menstrual cycle the thickening of cervical mucus , sperm migration, fertization, or ovulation. The fact that the IUD TCU380A somehow iritates the endometrial and makes it inhospitable to the blast cyst is generally accepted among reproductive scientists. The G.D Searle company concedes that. "the action of the IUDs TCU380A would seem to be a simple local phenomenon. That these devices prevent nidation (implantation) of an already fertilized ovum has been accepted as the most likely mechanism of action."

Rebecca Kaplan (2014) shows as that "IUDs TCU380A are more effective because women can forget about them after clinicians put the device in place." Saida Jeffrey Peipert. IUDs TCU 380A fail less that I percent of the time, according to statistics from the U.S centers for diseases control and prevention. Un intended pregnancies from IUDs TCU380A fall between 0.2 percent and 0.8 percent. This is compelling evidence that doctors should recommend an recommend an IUD TCU380A for teens seeking access to birth control. IUDs TCU380A have proven to be safe for use in teens.

Uterine perforation occurs in 0-8 per 100 insertions and is highest when the insertion ,is performed from 1-8 weeks after delivery. addition of bio active materials

such as copper and progesterone to the intrauterine devices has not significantly reduced pregnancy rate but has reduced the risk of,

i. Expulsion or abnormal bleeding.
ii. The major side effects and complications such as syncope, uterine perforation, Abnormal uterine and pelvic infection and ectopic pregnancy. Syncope or severe menstrual pain is a result of the real response that occurs in some women at the time of insertion.
iii. Bleeding and uterine cramping occur in 8-10% of women using a IUD TCU380A on account of 4-15 removal of the device per 100 women in the first year of use. The relative risk of pelvic infection among the over-all risk of ectopic pregnancy is lower in women using intra uterine device when compared with women using on contraception. Of the eligible couples only 15% used IUD. The reason for this very negligible usage could only be attributed to the lack of knowledge regarding IUD TCU380A usage, for many women see this as a threat to their physical and psychological well being. Thus there lies a very fertile ground to address the physical and psychological problems experienced by IUD TCU380A users.

In summary, every IUD TCU380A currently or previously manufactured prevents implantation.

STATEMENT OF PROBLEM

A descriptive study to assess the physical and psychological problems experienced by the Intra uterine device (IUD) users among mothers residing in selected rural areas at kannivadi primary health center in Dindigul District.

OBJECTIVES OF STUDY

- To assess the Physical and psychological problems about Intrauterine devices users among mother residing in selected rural areas at kannivadi primary health center in Dindigul District.

- To find out the association between physical & psychological problem experienced by the IUD users with their demographic variables.

HYPOTHESIS

H1: There will be significant association between the physical and psychological problems experienced by IUD users among mothers and their selected demographic variables of IUD users.

OPERATIONAL DEFINITION

INTRA UTERINE DEVICE

An intra uterine device is a reversible, long acting in expensive birth control device placed in the uterine cavity also know as an intra uterine device.

1) **Physical problems**

Physical well being – altered by infections, pains, allergic reactions and many more will comprise physical problems as measured by the observational check list.

a)Infection

Invasion and multiplication of micro-organisms in body tissues which may be clinically inapparent or resulting in local cellular injury due to competitive metabolism, toxins, intra cellular replication or antigen and antibody response in this study. It denotes pelvic pain, burning micturition, fever, chills and abnormal vaginal bleeding.

b) Pain

The more or less localized sensation of discomfort, distress or agony, resulting from the stimulation of specialized nerve endings. Here the pain refers to sensation of discomfort by IUD TCU380A users especially during menstruation, low backache, cramps in the right lower abdomen, which varies in intensity and type.

c) Spotting

The loss of a little amount of blood between menstrual periods.

2. PSYCHOLOGICAL PROBLEMS

Psychological problems refer to problems that mental well being of IUD TCU380A users, which are elicited by a checklist they are,

a) Fear

A normal emotional response in contrast to anxiety and phobia, to consciously recognize an external source of danger. In study it refers to apprehension due to becoming pregnant, contracting cancer, infections, expulsion of IUD TCU380A and the entry of IUD in to the abdomen.

b) psycho somatic disturbances

Pertaining to the mind-body relationship; having bodily symptoms of psychic, emotional (or)mental orgin, such as irregular appetite, loss of body weight , decline in sexual interest etc…,

c)Anger

Violent expression of passion, sudden and strong displeasure, expressed by individuals as a result of IUD TCU380A.

d)Frustration

The condition of emotional tension resulting when forces outside oneself block the performance of acts, which, if carried out would result in satisfaction. In the study having an IUD TCU380A at all times leading to emotional tensions is dealt as frustration.

ASSUMPTIONS

- IUD TCU380A users experience many physical problems.
- IUD TCU380A users experience many psychological problems.

DELIMITATIONS

The study is delimited to

- the selected rural areas at kannivadi PHC.
- A period of 6 weeks only.
- The data entirely dependant on the verbal response of the IUD TCU380A users.

PROJECTED OUTCOMES

The findings of the study would help the nurse to

- identify the physical and psychological problems experienced by IUD TCU380A users.
- plan the care.
- do follow up and early referral to prevent the complications of the IUD TCU380A users.
- plan out family welfare program depending upon the need of mother especially in adopting IUD TCU380A and plan their family effectively.

CHAPTER II

REVIEW OF LITERATURE

The review of literature entails systemic identification, location, scrutiny and summary of written materials that contains information relevant to the problem under study. (**Polit and Beck,2010)**

The Purpose of the review of literature is to obtain comprehensive knowledge and in-depth information about the physical and psychological problems experienced by IUD Users .Extensive review has been done to lay a Strong Foundation for the Study. It provides basis for future investigations that justifies the need for the study throws light on the feasibility of study. This chapter has review of studies done methodology adopted and conclusion obtained by other investigator which helps to study the problem in depth. The sources obtained are mostly from textbooks, journals and internet searches.

The literature review related to this study was discussed under the following heading:

- Studies related to physical problems experienced by IUD users.
- Studies related to psychological problems experienced by IUD users.

Studies related to physical problems experienced by IUD users.

Nirali.M.Chakraborty (2015) conducted a descriptional survey study that Intrauterine devices (IUDs) are placed in the uterine cavity with the objective of providing long-term contraception, mainly by preventing fertilization. Analyzed the literature using the standard Prescribed methodology; T-shaped copper IUDs, with a copper surface area of 380 mm^2 on 3 arms. IUDs are more effective than oral contraception used incorrectly; Among IUD users, there are an average of about 6 pregnancies per 1000 woman-years. The rare intrauterine pregnancies that occur in women using an IUD generally end in miscarriage. About 25% of these pregnancies end in a live birth if the device is left in place, compared to about 90% if the device is

removed; Ectopic pregnancies are rarer in IUD users than in women who do not use contraception. However, about one in 20 pregnancies that occur in women using an IUD is ectopic; The IUD is expelled in about 5% to 10% of cases within 5 years, and expulsion recurs in about 30% of these women; Problems such as difficult insertion, pain, bleeding and syncope are reported in less than 1.5% of cases overall; Uterine perforation during insertion is rare, occurring in 0.6 to 16 cases per 1000 insertions, regardless of the type of IUD.

The risk of perforation is higher when the IUD is inserted less than 4 to 6 weeks after delivery or elective abortion; During the first 3 months after insertion, the risk of pelvic infection is slightly higher than in the general population. There are about 6 pelvic infections per 1000 woman-years of IUD use. Women must be warned that IUDs do not protect them from sexually transmitted diseases; Menstrual bleeding is often heavier in women with copper IUDs than in women who do not use IUDs, and may be associated with menstrual pain; The only problems occurring in women who have never had children are pain during insertion and more frequent expulsions.

Alvarez et al (2015) conducted a gynecological survey study method to examine women using various IUDs as well as control women using no contraception. They recovered ova in 64 of 115 Control women (56%), 7 of 15 Women with inert IUDs(47%), 8 of 27 women with copper IUDs (30%). These data suggest that copper IUDs may have an ovicidal effect and therefore may also be more likely to destroy a fertilized ovum. This is consistent with data suggesting that the concentration of copper in fluid from the fallopian tube is similar to the concentration in fluid from the uterine cavity.

Drgangemi (2014) conducted a cross-sectional interview descriptive study over 200 million women worldwide use an IUD. In my practice I treat a lot of women

for hormonal issues such as pre-menstrual symptoms, menopausal symptoms, problems with conception, as well as a host of thyroid and adrenal gland related disorders. Actually I will not treat a woman more than once, if at all, if she is using an IUD because it's a certainty that it's causing some, if not all of, her problems. The purpose of this article is inform women, based off my clinical experience as well as current research, and regarding the prevalent problems associated with IUDs. You, or someone you know, may love your/their IUD and think it's the safest, easiest, and most effective form of birth control. I'd agree with you that it is both very easy and effective. But safe it is not; actually it's far from safe. It's often not a question whether your IUD is causing some health problem but how much of a problem it is causing.

Steven.W.Mosher(2012) conducted a demographic study that the list of unwanted side effects of (IUD) TCU380A is quite long. These include amenorrhea, inter menstrual bleeding and spotting, abdominal pain, pelvic pain, ovarian cysts, headache, migraines, acne, depression, and mood swings, a baby can be conceived and begin its 5-7 day journey down the fallopian tube. But when it reaches the uterus itself it encounters the grim reaper in the guise of an (IUD) TCU380A and its life is over. An (IUD) TCU380A as “contraceptive devices” but IUD‘s, act by aborting already conceived children not by preventing their conception. An IUD’s is, in effect, a tint abortion machine that prevents pregnancy by physically obstructing the normal process by which a tiny baby implants in the uterus of its mother. One of the more dangerous side effects is that (IUD) TCU380A become embedded in to the wall of the uterus, or it may actually perforate it. In fact, there have been reports of the (IUD) TCU380A actually migrating outside the uterus through the whole of its own making, there to cause scarring, infection, or damage to other organs.

Thompson xu et.al (2012) showed IUD use being highest among women ages 25-34 and lowest among ages 15-24. Studies that tracked patterns in IUD use have shown increased usage to be slowest in women 15- 24. Less than half of providers considered women, teenage females, HIV-positive women, postpartum (immediate), or post abortion (immediate) women to be suitable candidates for IUDs, according to WHO eligibility criteria. One reason for discontinuation in younger populations, however, is increased menstrual bleeding. Therefore, it is recommended that practitioners inform young patients of potential bleeding and pain that may accompany IUD insertion and post-insertion, as well as the possibility of expulsion in patients. Expulsion is essentially a "falling out" of the device. When an IUD expels, a woman may experience "unusual vaginal discharge, cramping or pain, inter-menstrual spotting, postcoital spotting, dyspareunia (painful intercourse) for the man or the woman, absence or lengthening of the IUD string, and the presence of the hard plastic of the IUD at the cervical os or in the vagina". The main concern from IUD expulsion is the resulting risk for unintended pregnancy. This risk is of particular concern for adolescent women.

Nahid Fathizadeh et.al (2011) Conducted a cross -sectional descriptive study over (TCU380A) Copper 'T' intra uterine device. TCU380A uses copper wire around the stem of the T'-shaped IUD which basically acts as a Spermicide. This also increases copper ions in the cervical mucus as copper is being continuously released, and therefore there is evidence of some women having issues with too much copper causing health problems. To lessen the copper exposure, some countries are starting to use gold or silver wrapped around the copper wire. TCU380A has been linked with heavier periods and painful cramps. Pelvic Inflammatory Disease (PID) in incidence is a risk factor as is infection and other complications. The IUD can literally implant

itself in the uterine wall which can also become a problem during removal. Unfortunately, some women do die from this. A patient of a colleague of mine had a sibling die from such a complication. Many women experience "normal" discomfort, irregular bleedings, loss of libido, or mysterious pains which are never linked back to the IUD itself. Copper is a main component of bile salts and therefore too much copper can greatly impact the health of the gallbladder as well as the liver. Copper also influences estrogen and therefore as copper increases it is said that similarly estrogen does too. Estrogen excess is involved with a host of problems such as premenstrual symptoms, excess body fat and certain cancers. Finally, some note that the copper can erode, which obviously would be a major problem, if not an emergency, and there is evidence pointing to copper oxidizing and causing damage to the cervix and uterus.

Dr. Hammad Al Qazi et.al(2010) conducted a cross-sectional study on contraceptive methods. The aim of this study is to determine the prevalence of contraceptive methods and factors associated with modern contraceptive in use. A cross sectional study of 288 females selected through consecutive sampling was conducted in Jinnah post medical center family reproductive health care center Karachi, Pakistan from November 2008 to January 2009. Females reproductive age 16-50 years using copper 'T' contraceptive measures and giving informed consent were included. Those who with severe debilitating disease, having any physical and mental disability were excluded. Two trained co researchers interviewed the participants for socio demographic reasons. The main outcome variables of the study were comparing modern and traditional contraceptive methods and factors associated with modern contraceptive in use. The results showed mean age of contraceptive users was 29.49(+- 6.42) years. Modern contraceptive method was used by 216(75%)

and traditional method by 72 (25%). Final multiple logistic regression showed that a few factors have influence on usage rate including :age>30 years. Modern contraceptive method use is very common in our region (75%). The important means of information for modern contraceptive in use were GPs and family planning workers.

David Hubacher et.al (2010) conducted a qualitative phenomenological study. The study population consisted of the women using intrauterine device (IUD) as contraception, referred to 14-Masoum, Amir Hamzeh, Ebn-e Sina, Shahid Motamed, and Navab Safavi clinical centers. Sampling was goal-based, and 14 individuals participated in the study. Data collection was carried out in four months using deep interview. Data analysis was performed using seven-step Colaizzi's method. Forty-eight women participating in six focus group discussions described their experiences using the IUD, the hormonal implant. Subsequently, 259 women using one of these methods for the first time were followed for up to 18 months to determine patterns of menstrual bleeding and perceptions of menstrual cycle change over time. Multivariable analytical methods were used to examine the associations between selected measures and method discontinuation. During the first six months of use, IUD users reported an average of six days of bleeding per cycle.

Soheila Ehsanpur (2010) conducted an interview survey study that most of those who experienced a problem before IUD insertion also noted experiencing a problem after the IUD was inserted. For example, 48 women reported that they had menstrual problems within the three months prior to the IUD insertion. Of these women, 42 (87.5%) said their periods changed after insertion, and 31 of these (64.6%) reported that they experienced much heavier bleeding after insertion. Similarly, almost half of the 61 acceptors who reported having abnormal vaginal discharge

before insertion also reported abnormal vaginal discharge after insertion, and 69% of the 42 women reporting abdominal pain before insertion also reported it afterwards. Despite this, most women ascribed their post insertion problem to the IUD itself. Blaming the IUD in total, 78% of the women (257) said that they experienced a problem that they thought was caused by the IUD. Almost half of all women (46.4%) described their menstrual changes and bleeding as excessive. 20.9% said they experienced abnormal vaginal discharge. 42.1% blamed the IUD for abdominal pain. 19.4% said they experienced painful intercourse.

zhou xiao et. al (2010) conducted randomized controlled trial method on 200 subjects to a copper IUD and 100 women to no method there were four pregnancies (2%) in the IUD group and 22 pregnancies (22%) in the non-intervention group. In an observational study in China reporting on postcoital insertion of a high copper load IUD in 1013 women, there was one pregnancy in parous and one in nulliparous women, giving an overall pregnancy rate of 0.2 per 100 women. It is very likely that the high degree of efficacy is related in part to the embryotoxic effect of high copper ion concentrations. The associated inflammatory changes also make the endometrium unfavourable for implantation. Studies in mouse models suggest that copper concentrations of 2.5×10^{-5} mol/l are embryotoxic in the genital tract. Copper IUDs with a 200 mm^2 copper surface area have 4000-fold higher concentrations (9×10^{-4} mol/l).

Mehaboob B.E.Alam et.al (2007) conducted a secondary analysis of a prospective study of 1,947 first-time copper IUD users. Over a one year period, we collected detailed information on side effects and looked for trends using generalized mixed effects regression modeling. During menses, most bleeding and pain side effects were found to decrease over time ($p < 0.05$). During inter menstrual intervals,

overall spotting and pain complaints remained unchanged, but number of days with these problems increased ($p < 0.05$). Serious side effects that prompted either a clinic visit or IUD removal had a varied pattern over time, depending on the type of problem. The findings of the interviews were assigned 104 codes categorized into three groups. 1- physical and psychological harms experienced by the method. 2- the shortcomings of the methods. The current use of IUDs, however, remains low (0.6%) compared with the use of other modern methods. Bleeding problems are thought to be particularly problematic for users of the higher copper-bearing IUDs, and, clinically, menstrual blood approximately 30% higher in copper IUD users than in nonusers.

Fatema Shabnam(2007) conducted a retrospective cross- sectional design with a multistage cluster sampling approach was employed to identify a sample of 375 respondents who had an IUD in March 2006. These women were then interviewed in March 2007, exactly one year after insertion, using a closed-ended, structured interview. Successful interviews were conducted with 330 of the 375 selected acceptors. The remaining were non responses for various reasons. Trained female enumerators conducted one-on-one interviews, which took place at the client's residence or at a suitable place in the community. The principal aim of this part of the study was to quantify the outcomes of IUD use and qualify the factors contributing to IUD. Of these a smaller sample of 30 women who had discontinued because of side effects was interviewed, using an in-depth interview (IDI) approach. A semi-structured questionnaire consisting of both open-ended and closed-ended questions was used to conduct IDIs with the IUD discontinuers. Some of the more skilled interviewers and some ACQUIRE staff managed these 30 interviews, most were tape-recorded. Questions revolved around the experience of having the side effect (e.g.,

how excessive bleeding manifested itself and what this meant). A total of 60 service providers were interviewed in private settings at the facilities and in the communities.

Hubacher et al (2007) conducted a descriptive co-relational study that Proper insertion is the key to preventing complications including perforations, expulsions and pain. Expulsion of an IUD occurs 1 in 20 women, and is most common in the first 3 months after insertion, often during menstruation. The most important adverse effects are dysmenorrhoea and bleeding, which lead to the removal of copper IUDs in 10% of women in the first year of use. The risk of an ectopic pregnancy is lower in women using an IUD (0.1% in 5 years) than in women using no contraception, but if pregnancy occurs with an IUD in situ, 1 in 20 pregnancies is ectopic, indicating that the IUD prevents mainly intrauterine pregnancies. Up to 50% of women stop using IUDs within 5 years, most often because of unacceptable vaginal bleeding or pain. The frequency of removals for bleeding problems (including amenorrhea) is similar for copper IUDs. 14% in copper 'T' users after 36 months of use. Copper IUDs are associated with an increased volume of menstrual flow and dysmenorrhoea.

Cheng et al (2007) conducted a clinical based hypothetical study that the effect of the copper IUD on the endometrium plays a role in its contraceptive action. Also, several long-term studies have established that when pregnancy occurs in IUD users the embryo is more likely to be ectopic than in control women using no contraception. The ratio of ectopic to intrauterine implantations is 1 in 6–8 among IUD pregnancies compared to 1 in 20 control pregnancies. The most plausible explanation for these findings is that IUDs are more effective at preventing pregnancy. Early Pregnancy Factor in the luteal phase is up to 50% of sexually active women with an inert IUD. In contrast, hCG and pregnancy specific beta 1-glycoprotein (PSBG) both were raised in only 0.7%; In fact hCG was detected in only

3 of 214 copper IUD users. Other studies using highly specific and more sensitive assays found hCG in less than 1% of IUD users. It is now thought that many of the early positive findings were due to cross reaction of the assays with pituitary LH. In conclusion, IUDs they interfere with sperm function and transport within the uterus and tubes. There is sufficient evidence to suggest that IUDs can prevent and disrupt implantation.

Bannister et al (2007) conducted a descriptional survey study the emergency IUD was inserted with ease in 96% of the parous women. Among 98 women with IUDs fitted for emergency contraception, pregnancy rates (3%), expulsion rates (9%) and removals for medical reasons (6%) were similar to the rates in controls with electively inserted IUDs. There were, however, more removals for personal reasons in the emergency IUD group (13 versus 6%,) all within 30 days after insertion. The infection risk with emergency IUD insertion should be assessed as with any IUD insertion although the circumstances surrounding unprotected intercourse may mean that infection risk is higher. An audit of emergency contraceptive consultation practices in the UK found that only 10 of 718 women (median age 24 years) were informed about IUDs and only 2 had an IUD inserted for emergency contraception. Possible reasons were suggested by an earlier study which questioned 100 family planning doctors and 100 family physicians about the potential barriers to insertion of an IUD for emergency contraception. The study also highlighted that many physicians overestimated the risk of PID associated with insertion of an emergency IUD.

Mohllajee et al (2007) conducted a systematic review study that the risks of pelvic inflammatory disease (PID) with insertion of an IUD in the presence of existing infection were reported which included six studies. With IUD insertion in the presence of chlamydia infection or gonorrhoea, subsequent PID rates were 0–5%,

compared to insertion in the absence of infection (0–2%).Although uterine perforation occurs in less than 1 in 1000 insertions. It is prudent to avoid predisposing conditions, such as a previous recent Caesarean section or distorted Uterine anatomy. Although uterine perforation is said to be more likely in the early weeks after childbirth, there were no perforations with insertion at 4 weeks postpartum and no significant differences in the discontinuation rates for any reason between 411 women who had an IUD inserted between 4 and 8 weeks postpartum, and 1197 women who had the IUD inserted more than 8 weeks after a term delivery.

Feldblum et al (2007) conducted a randomized controlled trial method that IUD copper continuation rates are within the range of continuation rates for other methods of contraception. In a systematic review of the literature, the National Institute for Health and Clinical Excellence in the UK reported cumulative discontinuation rates as high as 17% after 1 year and 28% after 2 years for the Cu-IUD. Women using copper IUDs are most likely to discontinue because of bleeding and/or pain. Overall, the commonest reason for discontinuation of a Cu-IUD is unacceptable bleeding patterns. Continuation rates are rarely reported from randomized trials.368 women to either a copper IUD: 77% of women were still using the IUD at 12 months of follow-up.

Studies related to psychological problems experienced by IUD users:

Michael Mc Evoy (2014) conducted a study on copper-T device users implicated in neurological and psychiatric conditions. Copper toxicity and deranged ceruloplasmin metabolism are strongly implicated in neurological and psychiatric conditions such as OCD and schizophrenia. A 2008 study found a direct association between elevated ceruloplasmin and OCD (obsessive compulsive disorder). Unfortunately, the study did not look at concomittant serum copper values, which

would have established the probable cause of elevated ceruloplasmin, i.e. high copper causing an increased production of the copper-carrying protein ceruloplasmin.

Copper toxicity has been studied in direct relationship to schizophrenia. Rather than lumping schizophrenia into one clinical condition, research scientist William Walsh, PhD has asserted that schizophrenics are of varying types. Based upon his research of schizophrenics (which includes an enormous database of testing results), copper toxicity is one primary etiology.

Abram Hoffer (2013) conducted a genetic study that a likely mechanism behind copper's psychological and neurological effects is its induction of dopaminergic activity. Dopamine is a neurotransmitter that is often referred to as the 'feel good' neurotransmitter. However, dopamine is converted into the excitatory neurotransmitter norepinephrine, and copper is a major co-factor for this conversion. Norepinephrine (also known as noradrenaline) induces "fight or flight" stress responses, excitatory physiological responses (such as elevated heart rate) and greatly impacts large parts of the brain responsible for thinking, arousal, alertness, decision making and emotional responses. Elevated norepinephrine caused by copper toxicity may be a major culprit in attention deficit disorder (ADD), obsessive compulsive disorder (OCD) and schizophrenia, as well as other behavioral-related issues. Research has found that norepinephrine levels are elevated in the cerebrospinal fluid as well as in certain regions of the brain among paranoid schizophrenics.

Johns Hopkins (2013) conducted a fascinating study from university school of medicine found that Huntington's disease features dramatic increases in copper protein activities. Parkinson's Disease features neurodegeneration, impaired motor function and dopamine neuronal damage. α-synuclein is a key protein that is expressed, and aggregates in the central nervous system among those with

Parkinson's. The Neuronal damage caused by α-synuclein is accelerated by numerous toxic metals, and the existing literature demonstrates that copper increases α-synuclein aggregation more than any other metal. Wilson's Disease is a condition that involves toxic copper accumulation due to genetic mutations of the ATP7B copper transport gene. As a result, copper cannot effectively bind to ceruloplasmin (the copper-carrying protein that transports 95% of total copper in the body). Wilson's induces numerous types of movement-deranged symptoms, similar to those of Parkinson's. If left untreated, Wilson's disease can result in severe liver damage known as hepatic cirrhosis, as well as damage to the basal ganglia of the brain. Research has shown that oral copper depletion therapy is highly effective at restoring health among those with Wilson's disease.

J.Lwelamira.G.Mnyamagda et.al(2012) conducted a descriptional survey study that the four most commonly reported changes include mood changes and depression, insomnia or other sleep problems,cognitive or memory problems, and decline in sexual desire, function, or both. No direct link between mood and diminished estrogen has been proved, but it is possible that mood changes result when hormonal shifts disrupt the established patterns of a woman's life. These changes can be stressful and may bring on "the blues." Mood swings can mean laughing one minute and crying the next, and feeling anxious or depressed. These changes are transient, however, and do not usually meet the criteria for a diagnosis of clinical depression, a more profound dysfunctional emotional state. Disrupted sleep from night sweats can cause a woman to feel fatigued and irritable. St. John's wort may have some mood-elevating effects. The Women's Health Initiative found that hormones seemed to increase the risk of dementia and cognitive problems. And other

research suggests that stress may be more closely linked with memory problems than hormonal fluctuations. This occurs 6 per 10,000 population.

Stewriffic wyzewoman et.al(2011) conducted a descriptive study that I'm also crazier than normal. I've always been depressed, and I've recently switched to bipolar meds because of increased mania, but I have daily crying jags (usually on the drive to work) and an increasingly short temper. I just feel like my emotions are not under my control. In my case, I had a really flattened affect, and it was just..bizarre, and the emotional impact was more noticeable, and less desirable. I'd be extremely surprised if it was indeed the IUD TCU380A exacerbating depression. When I had my IUD TCU380A inserted, I lost weight and recovered from a bad depression since the point is to, effect your moods. I would check out other things in your life before pinning the mood swings on the IUD TCU380A.

Stephen.A. Robinson SA(2010) conducted a randomized-controlled trail study that hormonal preparations have become one of the most popular methods used for controlling fertility. The literature over the last 40 years continues to reveal how their numerous side effects negatively impact many users and even society at large. Three large cohort trials were the first to demonstrate, on a grand scale, certain emotional and behavioral associations with contraceptive use. Current contraceptive use was associated with an increase rate in depression, divorce, tranquilizer use, sexual dysfunction, and suicide and other violent and accidental deaths. IUD contraceptive users, in contrast with non users, were found to have higher rates of depression, anxiety, fatigue, neurotic symptoms, sexual disturbances, compulsion, anger, and negative menstrual effects. Seven small randomized-controlled trials were found in a review of the literature which studied this hypothesis in a direct way. A study of women who were given either "weak female hormones" or a placebo failed

to duplicate the side effect profile found in all of the other studies where the IUD's were labelled as contraceptives. The evidence suggests that most of the side effects of IUD's contraception are a result of a psychological response to the practice of contraception. Results conducted that 3.75 % occurs in about 1000 women.

Theresa Vernon (2009) "Dr.paul eck conducted a analytical research study that the other thing that happens with excess copper and adrenal exhaustion is hypoglycemia and blood sugar swings. Low adrenal output results in low production of glucocortocoids, cortisol and cortisone, which play a role in maintaining proper blood sugar levels. So when production is low, you are underproducing those hormones and constantly going into hypoglycemia, which can result in depression, irritability, mood swings, poor concentration, poor memory, dizziness, fatigue, sleepiness and many more unpleasant effects. A lot of people don't realize they are hypoglycemics, but if their problems tend to start an hour or two after they've eaten, that is always a clue. Depending on the severity of the toxicity and the susceptibility of the person, copper can affect the mind very strongly. Initially copper toxicity may make a person active, productive and creative. But eventually such feelings will be undermined by lack of energy. Then we see people who have a million ideas and are always making lists, but who do not have the energy to follow through. This leads to chronic frustration followed by depression. This occurs in 20% among adults.

Carl Pfeiffer (2009) conducted a co-relational descriptive study that Copper increases the electrical potential of the neuron, probably because of the enhanced movement of sodium. This leads to over-production of the activating neurotransmitters-dopamine, norepinephrine, epinephrine, serotonin-leading to anxiety, racing mind and insomnia. The body will begin storing the excess copper in the brain as the liver becomes overloaded. Copper stimulates the diencephalon, which

is the emotional brain. Thus, copper-toxic people often keep themselves in a state of high drama, and their symptoms can even mimic bi-polar syndrome. Carl Pfeiffer, PhD, MD, has found that one-half to two-thirds of schizophrenics have high levels of copper, especially during acute phases. Copper has an adverse effect on methylation, a metabolic pathway that is essential for detoxification and for controlling free-radical activity. Poor methylation can be an important factor in cases of autism and schizophrenia. Researchers Pfeiffer and Goldstein demonstrated that brain waves exhibit an equivalent central nervous stimulation from either 5 mg of copper or 5 mg of Dexedrine-so copper is equally as stimulating as Dexedrine to the mind. This occurs in 89% of women with IUD usage at 36 months of follow-up.

CONCEPTUAL FRAME WORK

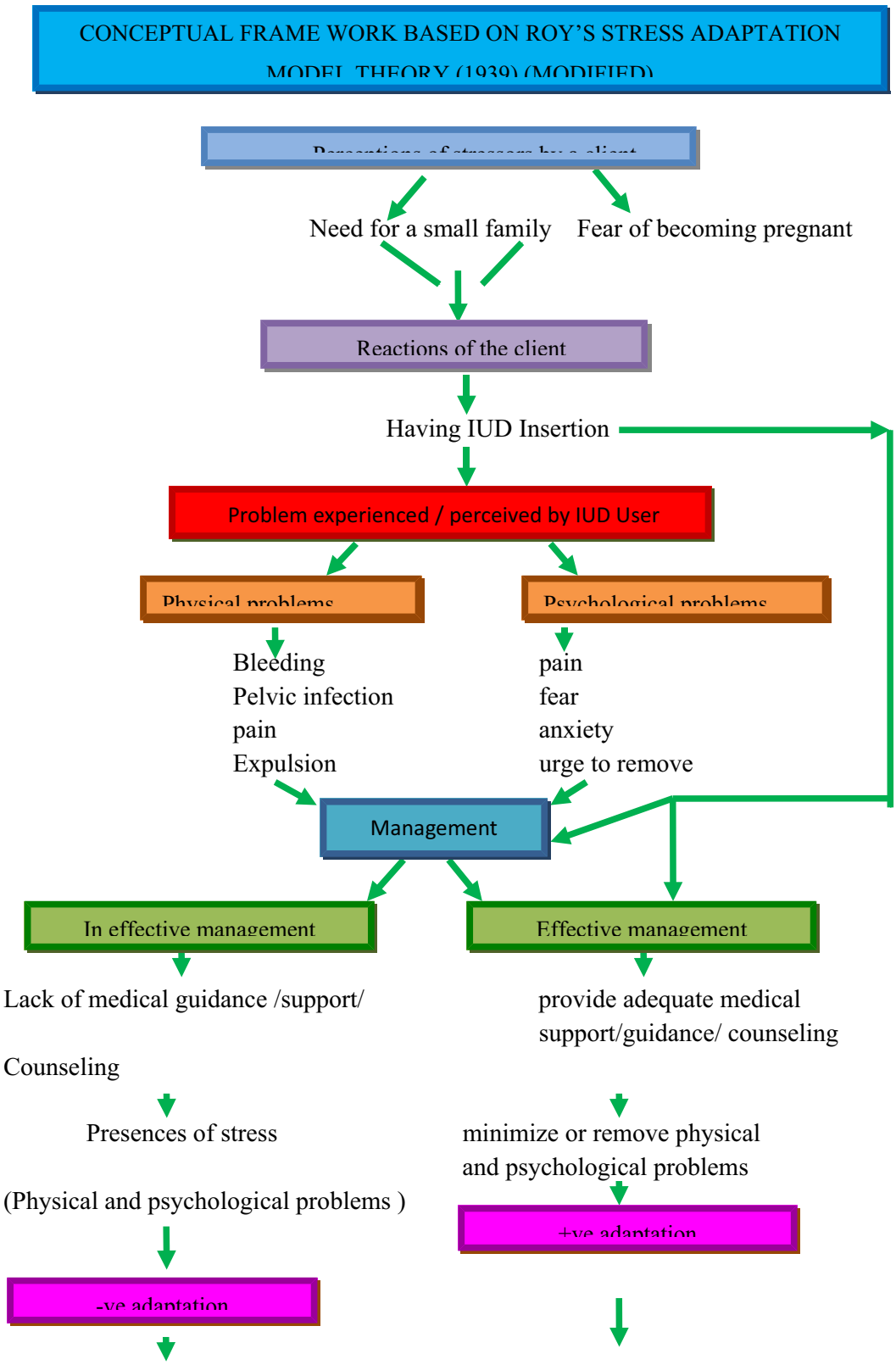
The conceptual framework of this study is based on the Sister Callista Roy's Stress adaptation model (1939). Sister Callista Roy's model focused the set of an organized components related to form as a "Whole" which is greater than the sum of their parts. This body system reacts and interacts with other systems in the environment , as a "Whole". Dysfunction in one component affects the entire system. For the present study the above – mentioned components have been modified as follows.

Roy states that the recipient of nursing care may be an individual, a family, a group, a community or a society and each one is considered as an adaptive system. The society or an individual person as living systems are in constant interaction with their environments. It causes exchange of information, matter and energy. The constant interaction of persons with their environment is characterized by both internal and external changes. With this changing world, Persons must maintain their own integrity (ie) each person must make some kind of adaptation for better

existence. Hence the person is viewed as an adaptive system. While applying this concepts into this study stresses experienced by an IUD user are due to the need for a small family are fear of becoming pregnant. Each IUD user reacts differently according to the perception of the stress. Some individuals experience physical problems such as vaginal bleeding, pelvic inflection, pain and perforation while others experience psychological problems which will result in pain, fear, anxiety and an urge to remove the IUD.

For the IUD users in effective management such as lakh of medical guidance and presence of stress (physical and psychological problems) will lead to negative adaptation and finally ends in fatality. In effective management such as adequate medical support, guidance and counseling was taken by them, they will experience only minimal stress anxiety and problems which leads to positive adaptation. If positive adaptation occurs they will be able to plan their family well and, in turn the quality of their life will be improved.

This chapter is dealt with the review of literature related to the problem selected for the study.


CONCEPTUAL FRAME WORK BASED ON ROY'S STRESS ADAPTATION MODEL THEORY (1939) (MODIFIED)
Need for a small family
Fear of becoming pregnant
Reactions of the client
Having IUD Insertion
Problem experienced / perceived by IUD User
Physical problems
Psychological problems
Bleeding
Pelvic infection
pain
Expulsion
pain
fear
anxiety
urge to remove
Management
In effective management
Effective management
Lack of medical guidance /support/
Counseling
provide adequate medical support/guidance/ counseling
Presences of stress
(Physical and psychological problems)
minimize or remove physical and psychological problems
+ve adaptation
-ve adaptation

Medical complications including fatality Absence of medical complications, Fatality

Promotion of better quality life

CHAPTER - III

RESEARCH METHODOLOGY

"THE FASTEST, MOST OFFICIENT, EASIEST AND BEST WAY OF DOING ANYTHING, INCLUDING THINKING IS THE ORGANIZED WAY"

The methodology of research indicates the general pattern of the procedure of gathering valid and reliable data for an investigation. This chapter provides a detailed description of the method adopted by investigator in this study.

Research methodology includes research approach, research design, the setting, the population, sample, criteria for sample selection, method of sample selection, and description of tools, pilot study, and procedure for data collection, plan for data analysis and protection of participants.

The present study aims to assess the physical and psychological problems experienced by the intra-uterine device users among selected areas at kannivadi Primary Health Centre in Dindigul District.

RESEARCH APPROACH

The research approach for the study was **survey approach.**

According to Polit and Beck (2010) "Survey Research" is said to be a branch of research that examines the characteristics, behaviors, attitudes and intentions of a group of people by asking individuals belonging to that group to answer a series of questions.

It implies that information is being collected from several subjects who resemble the total group in the characteristics being studied. Hence the researcher chose this survey approach for the study.

RESEARCH DESIGN

A descriptive non-experimental design was used for this study, which will enable the researcher to assess the physical and psychological problems among IUD users.

SETTINGS OF STUDY

This study was conducted at Kannivadi Primary Health Centre in Dindigul District, Which is 14 kms away from Sakthi College Of Nursing in Oddanchatram. Primary Health Centre covers a total population of 32,500-50,000. Primary Health Centre is a voluntary, non-governmental, non-political, non-recreational, non-profit making organization, which had so far 1500 abdominal tubectomy, 1000 puerperal sterilization, and 45 medical termination of pregnancy with sterilization, covering the entire population of areas around kannivadi Primary Health Centre. The total number of women underwent IUD insertion for the year 2013 was 200 and for 2014 was 153. Total bed strength of the hospital is 75.

POPULATION

The target population of the study is all mothers in their reproductive age (20-45 yrs) who use any form of intra uterine device to prevent conception and are residing in the areas at Kannivadi primary health centre in Dindigul District.

SAMPLE

Women with copper'TCU380A'(20-45 yrs) who had IUD inserted and residing at selected areas at Kannivadi primary health centre.

SAMPLE SIZE

The total sample size consisted of 100 women who were on IUD (Copper 'T').

CRITERIA FOR SAMPLE SELECTION

INCLUSION CRITERIA

The following criteria were employed for selecting the samples

1. Age limit (20 - 45 yrs)
2. IUD users for more than a month.
3. Women who speak Tamil (or) English
4. Only those who were willing to participate in the study

EXCLUSION CRITERION

All women who adopted permanent family planning methods were excluded from the study.

SAMPLING TECHNIQUE

Mothers who underwent IUD copper "T" insertion and who fulfilled the inclusion criteria were selected as samples by using convenient sampling technique. According to Drgangemi (2014), convenient sampling technique is a type of non-probability sampling method in which subjects who are convenient and accessible to the researcher are selected for the study.

RESEARCH TOOL AND TECHNIQUE

The tools used for this research study consisted of an interview schedule and observational checklist to assess the physical and psychological problems faced by IUD users.

Description of Tools

Section A: It consists of an Interview Schedule to assess the demographic characteristics of mothers using IUD such as age, education, income, occupation, religion, Duration, etc..

Section B: It consists of an Interview Schedule to assess the aspects related to the IUD insertion and general condition of the client before IUD insertion.

Section C: It consisted of an Observational Check list to identify the physical problems of mother with IUD, such as infection, pain, menstrual problems, and other physical problems.

Section D: It consisted of an Observational Check list to identify the psychological problems of mothers with IUD, such as fear, psychosomatic disturbances and other psychological problems.

SCORING PROCEDURE

SECTION C - Physical problems

It consists of five components, such as Infection, Pain, Pelvic infection, MenstruaI problems and other physical problem.

There are totally 31 sub components built on a 5 point Likert type scale, which has options such as, extreme signs, severe signs, moderate signs, minimal signs and no signs, with a score of 4,3,2,1 and 0 respectively.

A maximum score of 124 can be obtained, against a minimum score of Zero

0 - 25%. Denotes presence of mild physical problem

26 - 50% Denotes presence of moderate physical problem

51-100% Denotes presence of severe physical problem.

SECTION D - Psychological problems

It consists of three components, such as Fear, Psychosomatic disturbance and other psychological problems.

These components together sub components built on a 5 point Likert type scale, which has options such as, never, at times, often, very often and always with a score of 0,1,2,3 and 4 respectively.

A maximum score of 75 can be obtained against a minimum score of Zero

0 - 25% Denotes presence of mild psychological problem

26 - 50% Denotes presence of moderate psychological problem

51 - 100% Denotes presence of severe psychological problem.

TESTING OF THE TOOL

(A) CONTENT VALIDITY

To ensure the content validity, the instrument was given to seven experts in clinical field to seek their opinions about relevance of the items for the study. The content was found valid. After the content has been validated the tool was translated into Tamil. The translated instrument was given to a language expert for validity who retranslated the Tamil version of the tool to English. The content of the Tamil translation was found valid.

(B) RELIABILITY

The reliability of the tool was established by administering to six samples (around 10% of the actual sample size). They were selected according to the criteria

in the study. The test was administered and re administered between a gap of seven days. Test- retest method was used and the scores computed according to Karl Pearson 'r'. The reliability co-efficient of the tool was **r = 0.93**

PILOT STUDY

A refined tool was used for pilot study to test the reliability, feasibility and practicability. Formal approval was obtained from the head of the institutions and the pilot study was conducted among 10% of the total samples in the manner in which final study would be done. The pilot study revealed that the study was feasible. Data collected were analyzed to find out the suitability of statistics. These subjects were excluded from the original study. Criteria for sample selection were observed.

DATA COLLECTION PROCEDURE

Formal permission was obtained from the concerned authorities of Kannivadi Primary Health Centre. The period of data collection was planned between 9.30 am to 1.00 pm during November 2014, in accordance with IUD users among mothers residing in selected area. Among the 2 zones, comprising of 30 areas around Kannivadi Primary Health Centre, five areas were selected for the study.
Data was collected, as follows:

I Step -A list of mothers who had IUD inserted and was residing in the selected areas of Kannivadi Primary Health Centre, was collected from the VHN.

II Step - Samples identification and selection: Among the population of IUD users, 100 subjects were chosen by convenient sampling.

III Step-Having identified the samples the researcher assessed the degree of Physical and psychological problems faced by the IUD users using checklist. Daily

6-8 mothers were interviewed and the time taken for checklist was approximately 20-30 minutes per sample.

PLAN FOR DATA ANALYSIS

The-data were organized, tabulated and analyzed using descriptive and inferential statistics.

PROTECTION OF HUMAN SUBJECTS

The Dissertation committee prior to the pilot study and main study approved the research proposal. Formal permission was obtained from the Head of Sakthi college of Nursing, Oddanchatram. Written permission was sought from the Director of Kannivadi Primary Health Centre, Kannivadi. The purpose and other details of the study were informed and explained to the study subjects and the consent was obtained from the subjects. Prior to interview, assurance was given to the study subjects on the confidentiality of the data collected from them. Participants' anonymity was maintained.

This chapter has dealt with the research methodology adopted for the study. It includes the research approach, research design, setting, population, sample, sampling technique, research tool and technique, testing of the tool, data collection procedure and plan for data analysis.

CHAPTER – IV

DATA ANALYSIS AND INTERPRETATION

All meanings, we know depend on the key of interpretation

-George Eliot

The process of evaluating data using analytical and logical reasoning to examine each of the data provided. This form of analysis is just is one of the many steps that must be completed when conducting a research experiment. Data from various sources is gathered, reviewed, and then analyzed method, some of which include data mining, text analytics, business intelligence and data visualization.

Analysis is process of organizing and synthesizing data so as so to answer research questions and test hypothesis (Politand Beck 2010). This chapter deals with the findings and the description of the IUD users studied under this study. The description gives the demographic profile, the physical and psychological problems of IUD users.

ANALYSIS AND INTERPRETATION OF DATA

The following are the data on the

Section I : A) Demographic profile of IUD users studied

B) The various aspects covering IUD insertions.

Section II : The Physical problems experienced by IUD users such as; infections, pain, Pelvic infectious diseases, spotting, urinary

tract infection, bleeding, dysmenorrhea, menorrhagia, menstrual problems and psychological problems like dizziness, confusion, lethargy, insomnia, uneasiness, drowsiness, sleep disturbances, moodswings, depression, anger, frustration, anxiety, amnesia, restlessness, irritation and other psychosomatic disturbances.

Section III : Association between the level of physical and psychological problems of IUD users and their selected demographic variables.

SECTION I

A) Demographic profile of IUD users:

This section deals with the main demographic characteristics of IUD users Studied such as; age, educational back ground, occupation, monthly family income, religion, type of family, area of residence ,number of children, and duration of IUD usage.

The details of the Demographic characteristics are presented in Table -1.

Data on the demographic variables of IUD users.

Table – i) Frequency and Percentage distribution of IUD users according to their demographic data.

TABLE-1 DEMOGRAPHIC CHARACTERISTICS (N=100)

S.No	Demographic profile	N	%
1	**Age**		
	less than 25 years	60	60
	26-35 years	30	30
	36-45years	10	10
2	**Educational Background**		
	No formal education	10	10
	Primary education	25	25
	Secondary education	35	35
	Higher Secondary education	28	28
	Collegiate education	2	2
3	**Occupation**		
	Employed	30	30
	Unemployed	70	70
4	**Monthly family income**		
	Below 1000	20	20
	1000-2000	55	55
	2000-3000	10	10
	Above 3000	15	15
5	**Religion**		
	Hindu	80	80
	Christian	7	7
	Muslim	13	13
6	**Type of family**		

	Joint	15	15
	Nuclear	85	85
7	**Area of Residence**		
	Urban	20	20
	Rural	80	80
8	**Number of children**		
	One	70	70
	Two	25	25
	More than two	5	5
9	**Duration of IUD usage**		
	1-2 months	23	23
	2-6 months	33	33
	6-12 months	44	44

INFERENCE FROM TABLE -1

The data from Table -1 throws light on the following aspects of IUD users.

1. Age:

100 subjects studied were below 25 years of age and they constitute 60% of the total IUD users. 30 Subjects (30%) were in the age group between 25 and 35 years of age. Only such 10 (10%) subjects studied were in the age group between 36 and 45 years of age.

2. Education:

With regard to educational background of the subjects, 10 (10%) women had no formal education, 25(25%) women had studied up to primary school. 35(35%) women had studied up to secondary school, 28 (28%) women had studied up to Higher, Secondary School and 2 women had studied up to Collegiate levels that form 2% of the total IUD users.

3. Occupation:

The occupation profile revealed that 30 (30%) of the women were employed, while 70 women were unemployed constituting 70% of the total IUD users.

4. Monthly family income:

Regarding the income of the IUD users, it was found that the families If 20 (20%) women earned less than Rs. 1000. Families of 55 (55%) women earned a monthly income between Rs. 1000 and 2000. Families of 10(10%) women earned a monthly income between Rs. 2000 and 3000. While families of 15 women earned a monthly income of more than Rs. 3000, and thus forming 15% of the total IUD users.

5. Religion:

Out of the total 100 women 80 (80%) were Hindus, 7 (7%) were Christians and 13(13%) were Muslims.

6. Type of family:

The data from the Table - 1 reveals that 15 women belong to Joint family system constituting 15% of total IUD users. 85 women belong to nuclear family system constituting 85% of the total IUD users.

7. Area of Residence:

The domiciliary nature of the subjects as shown in Table 1 reveals that all the 90 (90%) women belong to the rural area, since the study was undertaken at Kannivadi Primary Health Centre in Dindigul District.

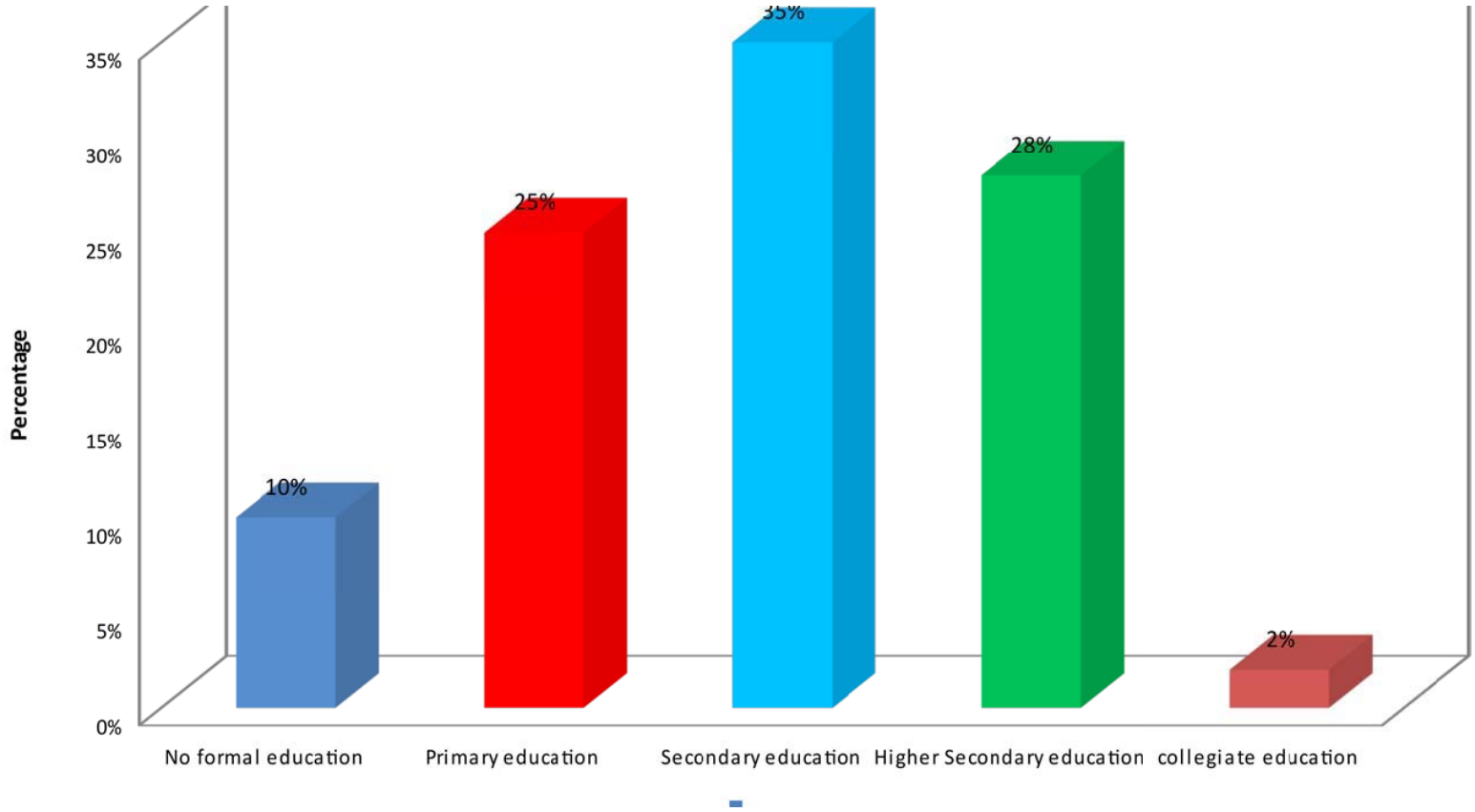
8. Number of Children:

The data from Table 1 reveals that 70 (70%) women had one child, 25 (25%) had two children and 5 (5%) women had more than 2 children.

9. Duration of IUD usage :

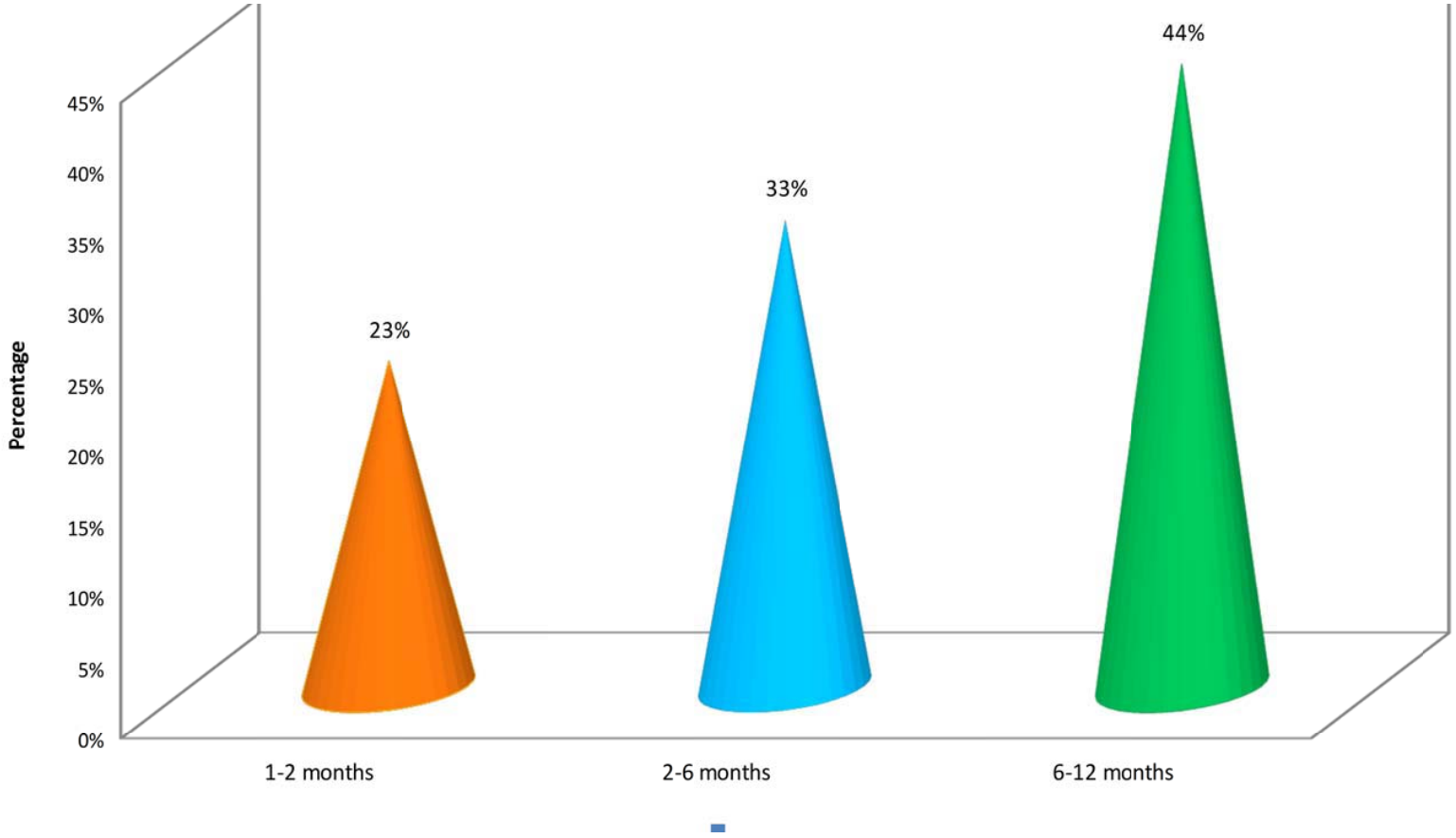
23 women had been using IUD for 1 - 2 months, constituting 23% of the total IUD users. 33 (33%) women had been using IUD from 2 - 6 months and 44 women had been using IUD for 6 - 12 months thus constituting 44%. None of the women had used IUD more than a year.

Figure- 2: Percentage Distribution of Education



Education

Figure- 9: Percentage Distribution of IUD usage



Duration of IUD usage

TABLE – 1(ii) DEMOGRAPHIC CHARACTERISTICS N=100.

TABLE-1 DEMOGRAPHIC CHARACTERISTICS (N=100)

S.No	Demographic profile	N	%
1	**Place where IUD inserted**		
	Primary health centre	78	78
	PHC	0	0
	Private Hospital	22	22
2	**Person who placed the IUD**		
	Private physician	12	12
	PHC Physician	25	25
	Staff Nurse	0	0
	VHN	63	63
3	**Going for regular checkup**		
	I)Yes	100	100
	II)No	0	0
4	**Periodicity of medical checkup**		
	Once every month	27	27
	Once in two months	43	43
	As and when the need arises	30	30
5	**Feeling comfortable with IUD**		
	I)Yes	0	0
	II)No	100	100
6	**Option of IUD users on whether IUD is the best contraception**		
	I)Yes	100	100
	II)No	0	0
7	**Medical problems**		
	a)Anemia for which under going		
	I)Yes	0	0
	II)No	100	100
	b)PID for which undergoing treatment	20	20

8	I)Yes	80	80
	II)No		
	Was your previous pregnancy uneventful?		
9	I)No	33	33
	II)Yes	77	77
	Was your previous delivery uneventful?		
10	I)No	4	4
	II)Yes	96	96
	Regularity of menstrual cycle prior to IUD		
11	**usage**		
	I)No	4	4
	II)Yes	96	96
	Pain during menstruation even before IUD		
	usage		
	I)No	20	20
	II)Yes	45	45
	Mild	30	30
	Moderate	3	3
	Severe	2	2

INFERERENCE FROM TABLE - 1 (ii) Demographic characteristics

Table - 1(ii) which contains data on various aspects of IUD insertion gives us an insight in the following aspects.

1. Place where IUD inserted:

As this study was conducted among women who had IUD insertion mainly at Kannivadi Primary Health Centre, the incidence of IUD insertion in Government Hospital does not come under this purview of the study. 78 (78%) women had the IUD insertion done in Kannivadi Primary Health Centre. Only 22 (22%) women had the insertion done at Private Hospital.

2. The person who placed the IUD:

It was found that 12 (12%) women had their IUDs inserted by private physician. It was also noted that 25 (25%) women had the insertions carried out by Kannivadi Primary Health Centre Physician. 63 women constituting 63% of the IUDs users had their IUDs inserted by the VHN. No woman had an IUD insertion done by a Staff Nurse, as there was no staff nurse available at the centre at that time.

3. Going for regular checkup:

It is clear from the table that all the 100 women who had their IUD insertions had gone for regular medical checkup, which shows there is 100% medical checkup.

4. Periodicity of medical checkup:

It is possible to draw the conclusion from the table that 27 (27%) women had their medical checkup once every month. 43 women had their medical checkup once in 2 months forming 43% of the total IUD users and 30 (30%) women had their medical checkup as and when need arises.

5. Feeling comfortable with IUD:

The data shows that all the 100 women studied had felt a discomfort with the IUD inserted in them. The discomfort percentage is thus 100.

6. Opinion of IUD users on the choice of contraception:

All 100 women forming 100% of the total IUD users had expressed their opinion that IUD is the best contraception.

7. Medical problems found - anemia and PID for which undergoing treatment:

The data from the table reveals that only 20 (20%) women had suffered from PID and on treatment. 80 women forming 80% of the total IUD users had not experienced any medical problems.

8. Previous pregnancy :

Previous pregnancy was uneventful for 77 (77%) women.

9. Previous delivery :

It is found that 4 (4%) women had suffered from problems such as postpartum hemorrhage, puerperal sepsis etc. While 96 women forming 96% of the total IUD users had no such problems.

10. Regularity of menstrual Cycle prior to IUD usage:

Of the 100 women studied only 4(4%) women had irregular menstruation. 96 (96%) of the total IUD users had regular menstruation prior to IUD insertion.

11. Pain during menstruation even before IUD usage:

Of the 100 women studied 45 (45%) had complained that they had suffered pain during menstruation even before having the IUD inserted. On the other hand 20 women had not suffered from pain during menstruation even before IUD insertion and these women form 20% of the total IUD users.

Of those 34 women who had suffered from pain during menstruation, 31 (31%) women experienced mild pain, 3 (3%) women experienced moderate pain and 1 (1%) women experienced severe pain.

SECTION – II

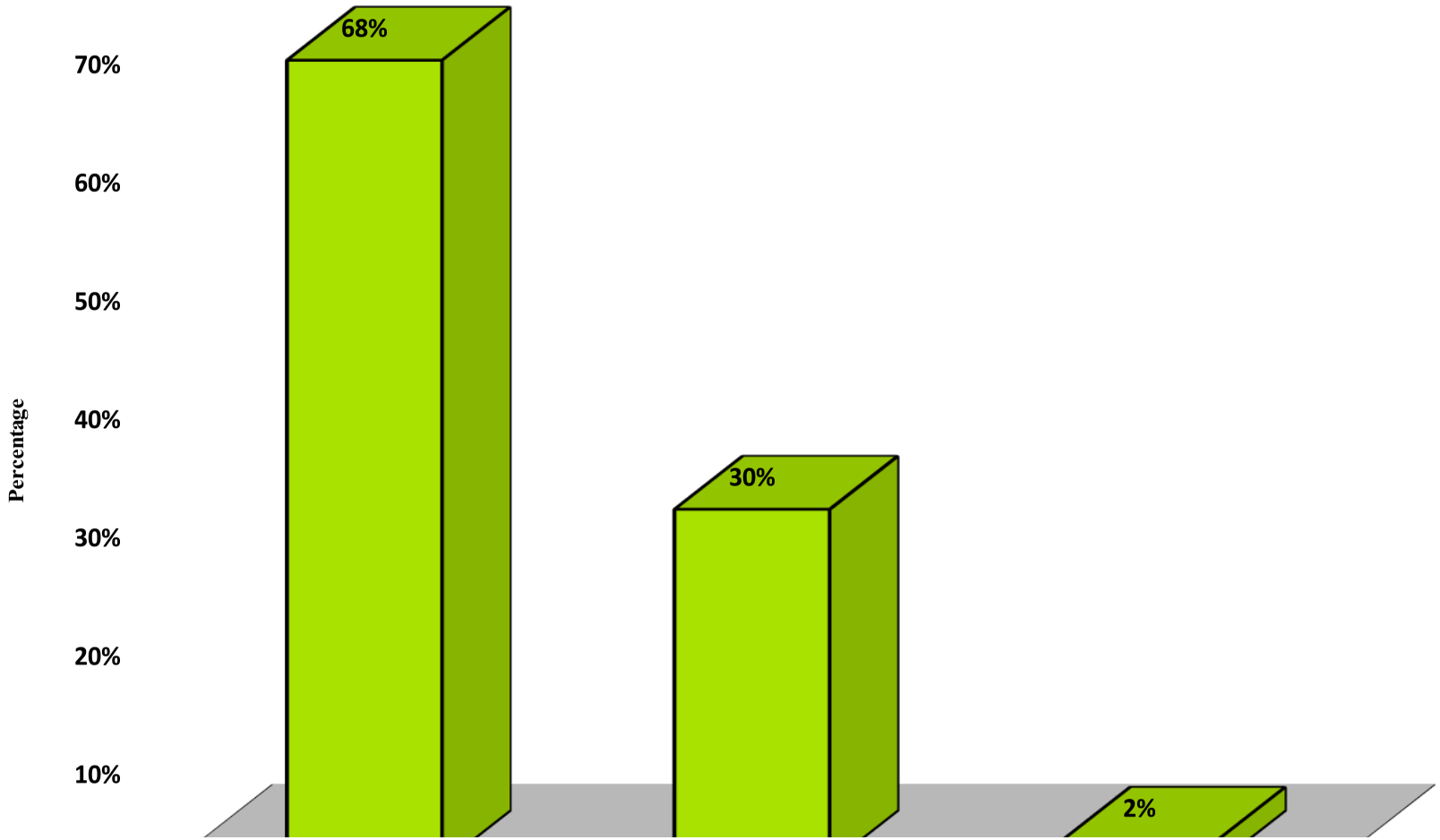
The Physical Problems experienced by IUD Users:

This section deals with the many physical problems under gone by IUD users such as infections, pain, urinary tract infection, menstrual problems and other physical problems.

Table – 2

DISTRIBUTION OF IUD USERS – INFECTION (N=100)

S.NO	Infections	Extreme Signs		Severe Signs		Moderate Signs		Minimal signs		No signs	
		N	%	N	%	N	%	N	%	N	%
(a)	Fever	0	0	0	0	10	10	23	23	67	67
(b)	Chills	0	0	0	0	10	10	23	23	67	67


Percentage
70%
60%
50%
40%
30%
20%
10%
68%
30%
2%

INFECTIONS

a) Fever:

With regard to infections 33 (33%) women had suffered from fever and out of this 10 (10%) woman had suffered from moderate fever while 23 (23%) had suffered from mild fever. 67 (67%) of the total IUD users had not suffered from any fever.

b) Chills:

Similarly 33 women (33%) had suffered from chills while 67 women forming 67% of the total IUD users had not suffered from chills. Of these 33 women (33%) 33 women had suffered from minimal chills and 10(10%) woman had suffered from moderate chills.

Table - 3

DISTRIBUTION OF IUD USERS - PAIN (N=100)

S.NO	Pain	Extreme Signs		Severe Signs		Moderate Signs		Minimal signs		No signs	
		N	%	N	%	N	%	N	%	N	%
(a)	Cramping pain	0	0	16	16	22	22	20	20	42	42
(b)	Throbbing pain	0	0	0	0	0	0	0	0	0	100
(c)	Stabbing pain	0	0	0	0	0	0	0	0	100	100
(d)	Radiating pain	0	0	0	0	0	0	0	0	100	100
Pain(Location)											
(a)	Tenderness of Vagina	0	0	0	0	0	0	0	0	100	100
(b)	Lower abdominal pain	0	0	18	18	20	20	19	19	43	43
(c)	Back ache	0	0	17	17	25	25	16	16	42	42
Pain(Location)											
(a)	Acute	0	0	28	28	31	31	29	29	12	12
(b)	Chronic	0	0	0	0	0	0	0	0	100	100

Pain(Duration)											
(a)	On and Off	0	0	27	27	32	32	29	29	12	12
(b)	Persistent	0	0	0	0	0	0	0	0	100	100

DISTRIBUTION OF IUD USERS - PAIN (N=100)

PAIN (Nature)

The pain experienced by the IUD users had been found to be of 4 types in nature; namely cramping pain, throbbing pain, stabbing pain and radiating pain. No woman who comes under this study experienced pain of any of the above-mentioned types.

a) Cramping pain

16 women had suffered from severe cramping pain and constituted 16% of the total IUD users. 22 (22%) women had suffered from moderate cramping pain. 20 (20%) women suffered from minimal cramping pain. The number of women who did not suffer from cramping pain was found to be 42 forming 42% of the total IUD users.

b) Throbbing pain c) Stabbing pain d) Radiating pain

Of the 100 women studied no woman had suffered from either throbbing pain or stabbing pain or even from radiating pain.

Pain location:

With regard to location of pain suffered by the IUD users, none had suffered from extreme signs of tenderness of vagina, abdominal pain and backache.

While this is so, among the total samples, 57 women had suffered from lower abdominal pain and of these, 18 (18%) had suffered from severe, 20 (20%) from moderate, and 19 (19%) from minimal lower abdominal pain. Only 43 (43%) had not suffered from lower abdominal pain. Thus while 57% IUD users had suffered from lower abdominal pain only 43% had not suffered from it. Of the 100 women studied 42 (42%) were found to have suffered from backache, consisting of 17 (17%) women with severe suffering, 25 (25%) women with moderate suffering and 16 (16%) women with minimal suffering.

Pain (Onset)

a) Acute:

It was found that of those who had suffered from lower abdominal pain, had felt the pain acutely and these people constitute 88% of the IUD users. Of those sufferers from acute pain 28 (28%) women had felt the pain severely. 31 (31%) women felt the pain moderately. 29 women comprising 29% of the IUD users felt the pain minimally.

b) Chronic:

No women suffered from chronic pain.

Pain (Duration)

a) On and Off:

With regard to the duration of pain except two women forming 88%, all the other IUD users had felt the pain on and off. While no woman had suffered from persistent pain, 29 (29%) women had felt the minimal pain on and off, 32 (32%) women had felt the moderate pain on and off and 27 women comprising 27% of the IUD users felt the severe pain on and off.

Table -4

DISTRIBUTION OF IUD USERS – PID (N=100)

S.NO	Pelvic Infection	Extreme Signs		Severe signs		Moderate Signs		Minimal signs		No signs	
		N	%	N	%	N	%	N	%	N	%
(a)	Frequency of urination	0	0	5	5	10	10	20	20	65	65
(b)	Burning micturition	0	0	5	5	11	11	18	18	66	66
(c)	Dyspareunia	1	1	13	13	30	30	24	24	30	30
(d)	Vaginal irritation	0	0	2	2	6	6	3	3	89	89
(e)	Vaginal itching	0	0	2	2	6	6	4	4	88	88
(f)	Excessive Vaginal discharge	0	0	27	27	34	34	19	19	20	20

Pelvic Infection:

a) Frequency of Urination:

It is found that only one woman forming 5% had suffered from severe frequency of urination, 10 women forming 10% had moderate signs and 20 women comprising 20% had experienced minimal frequency of urination. The remaining 65 women comprising 65% had not suffered from frequency of urination.

b) Burning micturition:

One woman forming 5% is found to have suffered from severe burning micturition, 11 (11%) women had suffered from moderate burning micturition and 18 (18%) women had suffered minimal burning micturition. The remaining number of women comprising 66% had not suffered from burning micturition.

c) Dyspareunia:

It is found that one woman forming 1% had suffered extreme dyspareunia, 13 (13%) women had suffered from severe dyspareunia, 30 (30%) women had suffered from moderate dyspareunia while 24 (24%) women had suffered from minimal dyspareunia. The remaining 30 women forming 30% had not suffered from dyspareunia.

d) Vaginal irritation:

No woman had suffered from extreme vaginal irritation, 2 women forming, 3% had suffered from severe vaginal irritation. 6 (10%) women suffered from moderate vaginal irritation and 3 women forming 5% suffered from minimal vaginal irritation. The remaining 89 (89%) women had not suffered from vaginal irritation.

e) Vaginal itching:

No woman had suffered from extreme vaginal itching. 2 woman forming 3% had suffered from severe vaginal itching, 6 (10%) women had suffered from moderate vaginal itching, and 4 (7%) women had suffered from minimal vaginal itching. The remaining 88 (88%) women had suffered no vaginal itching.

f) Excessive vaginal discharge:

No woman had suffered from signs of extreme vaginal discharge. 27 women (27%) had suffered from severe vaginal discharge, 34 women (34%) had suffered moderate vaginal discharge. while 19 women (19%) had under gone minimal excessive vaginal discharge. Only 20 women (20%) had not suffered from vaginal discharge.

Table-5

DISTRIBUTION OF IUD USERS – MENSTRUAL PROBLEMS (N=100)

S.NO	Menstrual problems	Extreme Signs		Severe signs		Moderate signs		Minimal Signs		No signs	
		N	%	N	%	N	%	N	%	N	%
(a)	Irregular Menstrual cycle	0	0	2	2	12	12	10	10	76	76
(b)	Spotting In-between menstruation	0	0	0	0	3	3	4	4	93	93
(c)	Menorrhagia	0	0	0	0	0	0	0	0	100	100

Menstrual problems:

a) Irregular menstrual cycle:

No woman had suffered from extreme irregular menstrual cycle. 2 women (3%) had suffered from severe irregular menstrual cycle. 12 women (20%) had moderate irregular menstrual cycle. while 10 women (17%), had suffered from minimal irregular menstrual cycle. The remaining 76 women (76%) had not suffered from irregular menstrual period.

b) Spotting in between menstruation:

It is found that no woman had suffered from extreme or severe spotting in between menstruation. 3 women (5%) had suffered from moderate spotting. while 4 women (7%) had suffered from minimal spotting. The remaining 93 women (93%) had not suffered from spotting.

c) Menorrhagia:

None of the 100 women (100%) had suffered from menorrhagia.

Table-6

DISTRIBUTION OF IUD USERS – MENSTRUAL PROBLEMS (N=100)

S.NO	Other physical problems	Extreme Signs		Severe signs		Moderate signs		Minimal signs		No signs	
		N	%	N	%	N	%	N	%	N	%
(a)	Uneasiness	0	0	2	2	16	16	22	22	60	60
(b)	Loss of appetite	0	0	9	9	8	8	4	4	79	79
(c)	Weakness	0	0	12	12	21	21	19	19	48	48
(d)	Insomnia	2	2	7	7	13	13	16	16	62	62

(e)	Weight loss	0	0	9	9	10	10	6	6	75	75
(f)	Weight excess	0	0	4	4	5	5	0	0	91	91
(g)	Expulsion of Copper 'T'	0	0	0	0	0	0	0	0	0	0
(h)	Pregnancy	0	0	0	0	0	0	0	0	0	0
(i)	Ectopic Pregnancy	0	0	0	0	0	0	0	0	0	0
(j)	Perforation	0	0	0	0	0	0	0	0	0	0

Other Physical problems:

a) Uneasiness:

No woman had suffered from extreme uneasiness. 2 women (3%) had suffered from severe uneasiness, 16 women (27%) had suffered from moderate uneasiness and 22 women (37%) had suffered from minimal uneasiness. The remaining 60 women (60%) did not suffer from uneasiness.

b) Loss of appetite:

No woman had suffered from extreme loss of appetite. 9 women (15%) had suffered from severe loss of appetite, 8 women (13%) had suffered from moderate loss of appetite. 4 women (7%) had suffered from minimal loss of appetite. The remaining 79 women (79%) had loss of appetite.

c) Weakness:

No woman had suffered from extreme weakness while 12 women (20%) had suffered from severe weakness, 21 women (35%) suffered from moderate weakness and 19 women (32%) had suffered from minimal weakness. The remaining 48 women (48%) had not suffered from weakness.

d) Insomnia:

2 women (3%) had suffered from extreme insomnia, 7 women (11%) had suffered from severe insomnia. 13 women (22%) had suffered from moderate insomnia. 16 women (27%) had suffered from insomnia. The remaining 62 (62%) women had not suffered from insomnia.

e) Loss of weight:

No woman had suffered from extreme loss of weight, 9 women (15%) had severe weight loss, 10 women (17%) had moderate loss of weight, 6 women (10%) had minimal loss of weight. The remaining 75 women (75%) had not lost any weight.

f) Weight gain:

No woman in the study had under gone extreme (or) minimal weight gain. 4 (7%) had under gone severe weight gain. 5 women (8%) had moderate weight gain. 91 women (91%) had not gained any weight.

g) Expulsion of Copper 'T':

All the 100 women had not experienced expulsion.

h) Pregnancy:

No women in the study had attained pregnancy while using IUD.

i) Ectopic Pregnancy:

No women in the study had attained ectopic pregnancy while using IUD.

j) Perforation:

No women in the study had perforation of the uterus while using IUD.

Table – 7

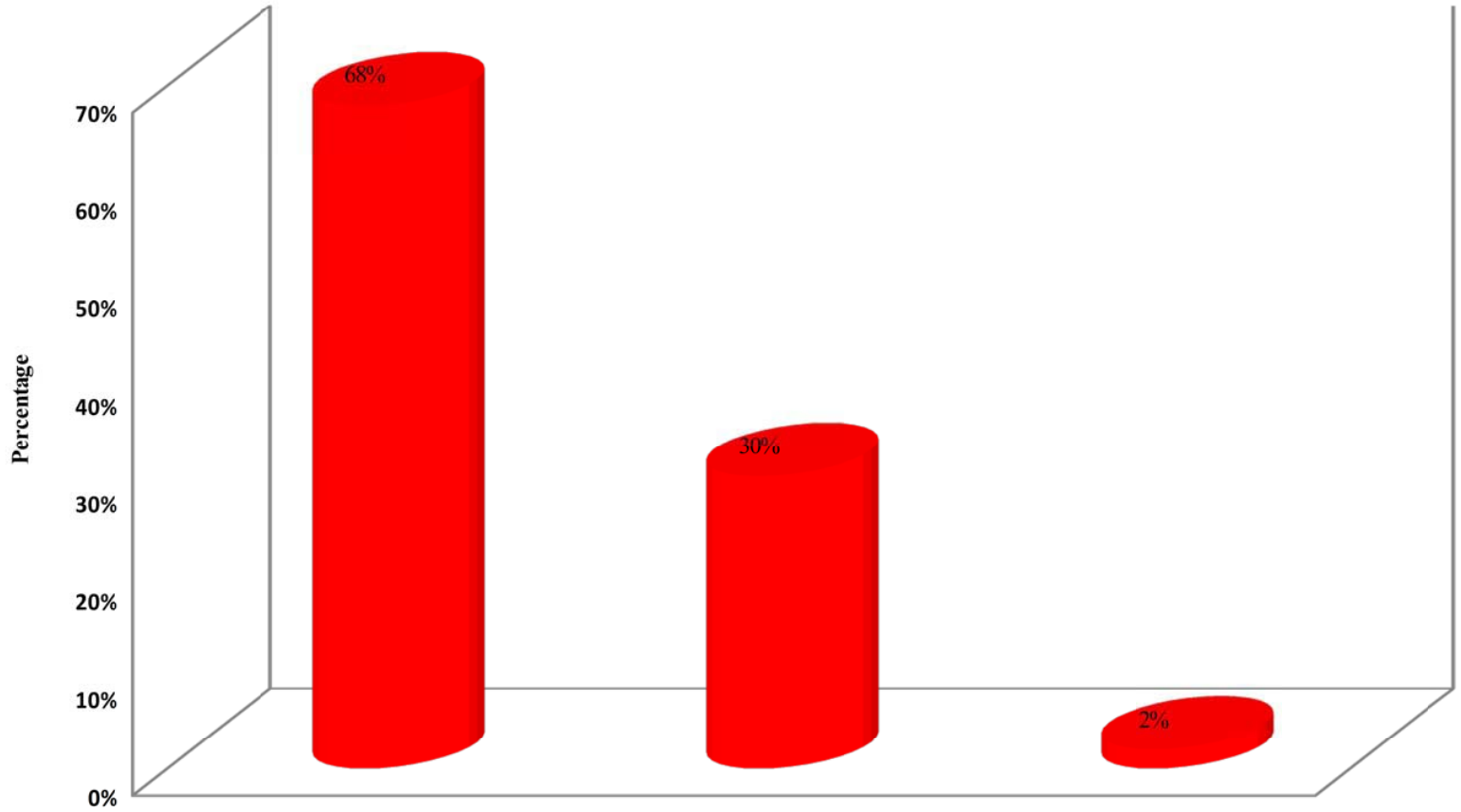
DEGREE OF PHYSICAL PROBLEMS EXPERIENCED BY IUD USERS

(N=100)

S.No	**Degree of Physical Problems**	**F**	**%**
1	Mild(0-25%)	68	68
2	Moderate(26-50%)	30	30
3	Severe(51-100%)	2	2

Table - 7 reveals that the majority of the subjects 68 (68%) experienced only mild physical problems. 32 (32%) experienced moderate physical problems and 2(2%) of the samples had severe physical problems in using IUD.

Figure :11 Percentage Distribution of Degree of Physical Problems



SECTION III

THE PSYCHOLOGICAL PROBLEMS EXPERIENCED BY THE IUD USERS.

This section deals with the psychological problems experienced by IUD users such as fear, psychosomatic disturbances and others.

Table – 8
DISTRIBUTION OF IUD USERS – FEAR (N=100)

S. NO	FEAR	Never		At Time		Often		Very often		Always	
	Do You fear,	N	%	N	%	N	%	N	%	N	%
(a)	that you may become pregnant with IUD?	17	17	57	57	10	10	3	3	0	0
(b)	that you may develop cancer?	60	60	20	20	10	10	10	10	0	0
(c)	that you are susceptible for infection?	54	54	21	21	15	15	10	10	0	0
(d)	that the IUD might be expelled?	20	20	42	42	18	18	20	20	0	0
(e)	that the IUD may enter the abdomen?	39	39	10	10	51	51	0	0	0	0

FEAR:

a) Fear of becoming pregnant even with IUD insertion:

Out of 100 women only 17 (17%) had never had this fear. 57 women (57%) had this fear at times. 10 women (10%) had suffered this fear often, while 3 women (3%) had this fear very often and none had this fear always.

(b) Fear of developing cancer:

None of the 60 (60%) women has had this fear.

(c)Fear of susceptibility for infections:

100women forming 54(54%) never had this fear while one person 21(21%) had this fear at times and 15 women (15%) had often had this fear.

(d) Fear of IUD expulsion (Copper 'T') :

20 women (20%) never had this fear while another 42 women (42%) had this fear. 18 women (18%) had often this fear while 20 women (20%) have had this fear very often.

(e) Fear of IUD entering into the abdomen:

39 women (39%) had never had this fear. 10 women (10%) had this fear at times. 51 women forming (51%) had often had this fear.

Table-9
DISTRIBUTION OF IUD USERS – PSYCHOSOMATIC DISTURBANCES
(N=100)

S.	Psychoso	Neve	At	Oft	Ver	Alwa

NO	matic disturbances	r		Time		en		y often		ys	
		N	%	N	%	N	%	N	%	N	%
(a)	Could you feel a change in your appetite?	39	39	34	34	8	8	19	19	0	0
(b)	Do you feel that you have lost your weight?	48	48	26	26	20	20	6	6	0	0
c)	Do you feel that you are not active as before ?	3	3	12	12	60	60	25	25	0	0
(d)	Do you feel that your sexual interest in declining ?	26	26	35	35	25	25	14	14	1	0
(e)	Do you feel very anxious that you cannot sleep properly?	50	50	27	27	20	20	3	3	0	0

Psychosomatic disturbances:

(a) Feeling of change in appetite :

39 women (39%) never had this feeling. 34 women (34%) felt change in their appetite at times. 8 women (8%) felt a change in their appetite often, while 19 women (19%) very often felt this change.

(b) Feeling of losing weight:

48women (48%) had never felt loss of weight. 26 women (26%) had this feeling at times. 20 women (20%) had often felt this, while 6 women (6%) had very often felt that they had lost weight.

(c) Not active as before:

3 women (3%) had never had the feeling that they are not as active as before. 12 women (12%) had this feeling at times. 60 women (60%) had this feeling often, while 25 women (25%) had very often felt that they were not active as before.

(d) Decline in sexual interest:

26 women (26%) had never had this feeling. 35 women (35%) have had this feeling at times. 25 women (25%) had often felt that their sexual interest had declined. While 14 women (14%) had this feeling very often, only one woman (1%) had always had this feeling.

(e) Feeling of anxiety of not be able to sleep properly:

50 women (50%) had never felt this anxiety. 27 women (27%) had this anxiety at times. 20 women (20%) had often undergone this anxiety. 3 women (3%) had very often felt this anxiety.

Table-10

DISTRIBUTION OF IUD USERS - OTHER PSYCHOLOGICAL PROBLEMS

(N=100)

S. N	Other psycho	Never	At	Of	Very	All

O	logical problems			Time		ten		often		ways	
		N	%	N	%	N	%	N	%	N	%
(a)	Do you feel angry irrationally?	31	31	29	29	30	30	10	10	0	0
(b)	Do you feel that you may become infertile permanently?	100	100	0	0	0	0	0	0	0	0
(c)	Do you feel frustrated to have IUD all the time?	53	53	25	25	22	22	0	0	0	0
(d)	Do you get angry with your husband for lack of understanding?	40	40	35	35	25	25	0	0	0	0

OTHER PSYCHOLOGICAL PROBLEMS.

(a) Feeling angry irrationally:

31 women (31%) had never felt angry irrationally. 29 women (29%) had at times felt angry irrationally. 30 women (30%) had often felt angry irrationally, while 5 women (5%) had very often felt this way.

(b) Feeling of becoming infertile permanently:

All the 100 women who had IUD insertions had never felt that they would become infertile permanently.

(c) Feeling frustrated to have IUD all the time:

53 women (53%) never have had the frustration of having the 'IUD all the time. 25 women (25%) have had this frustration at times. 22 women (22%) have had often suffered from this frustration.

(d) Getting angry with the husband for lack of understanding:

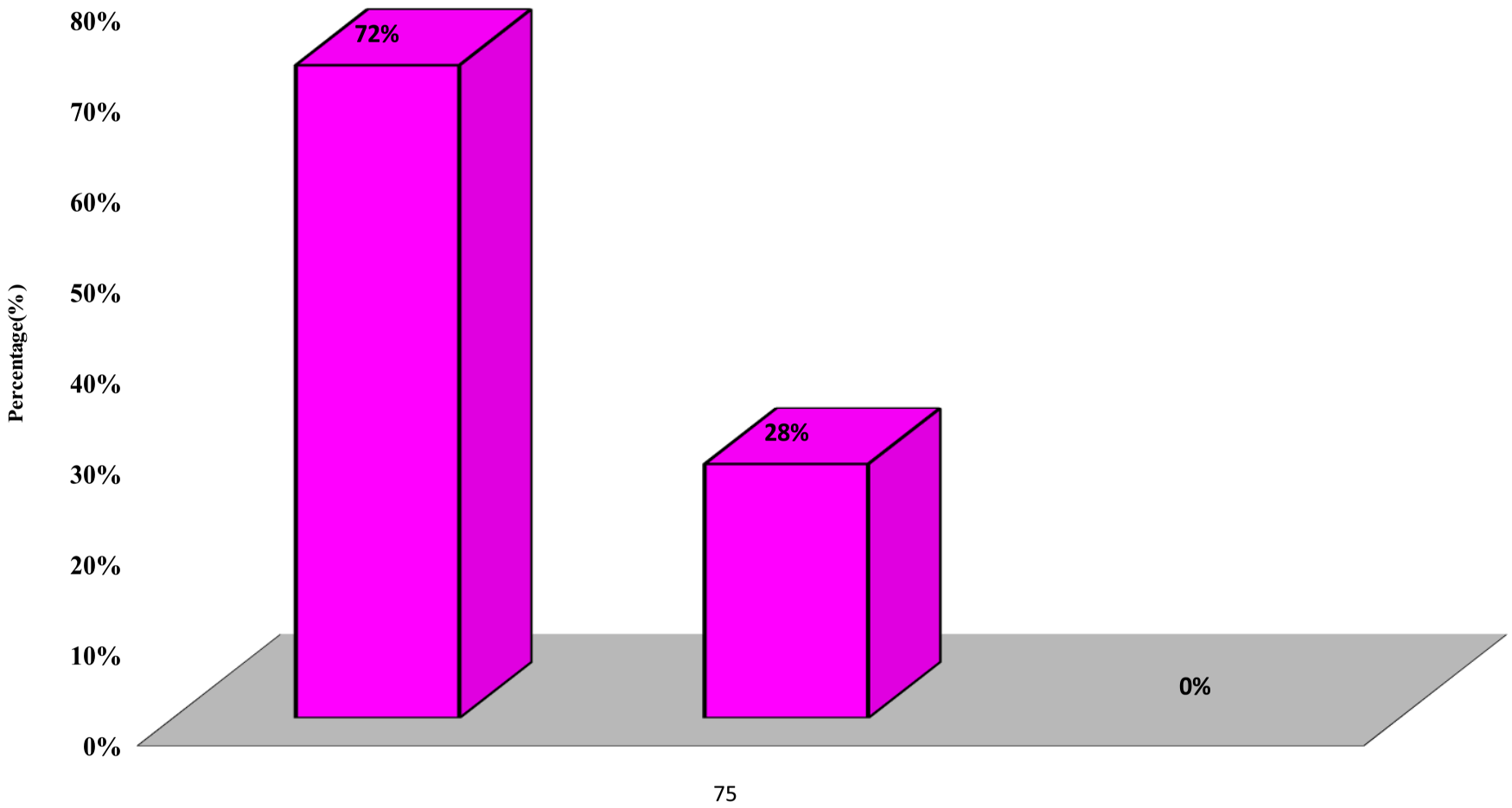
40 women (40%) never got angry with their husband for lack of understanding. 35 women (35%) got angry only at certain times with their husbands, while 25 women (25%) got angry with their husbands often.

Table – 11
DEGREE OF PSYCHOLOGICAL PROBLEMS EXPERIENCED BY IUD USERS

(N=100)

S.No	Degree of Psychological Problems	F	%
1	Mild(0-25%)	72	72
2	Moderate(26-50%)	28	28
3	Severe(51-100%)	0	0

Table - 11 reveals that the majority of the study subjects 72 (72%) had experienced only mild psychological problems. 28 (28%) had experienced moderate psychological problems and none of the sample had any severe psychological problem in using IUD. This chapter dealt with analysis and interpretation of the findings of the study.


80%
70%
60%
50%
40%
30%
20%
10%
0%
Percentage(%)
72%
28%
0%
75

4.5.1: Association between level of physical problem and their selected demographic data.

Demographic variables	Mild (68)		Moderate(30)		Severe (2)		χ^2	p-value
	f	%	f	%	f	%		
1. Age								
less than 25 years	41	41	18	18	1	1	8.82	
26-35 years	18	18	12	12	0	0	(df=4	0.066
36-45years	9	9	0	0	1	1	)	NS
2. Educational Background								
No formal education	7	7	3	3	0	0		
Primary education	18	18	6	6	1	1		
Secondary education	25	25	10	10	0	0	3.12 (df=8	0.927
Higher Secondary education	17	17	10	10	1	1	)	NS
Collegiate education	1	1	1	1	0	0		
3. occupation								
Employed	22	22	8	8	0	0	1.19	
Unemployed	46	46	22	22	2	2	(df=2	0.55
							)	NS
4. Monthly family income								
Below 1000	18	18	2	2	0	0		
1000-2000	37	37	17	17	1	1	10.81	
2000-3000	7	7	3	3	0	0	(df=6	0.094
Above 3000	6	6	8	8	1	1	)	NS
5. Religion								
Hindu	65	65	23	23	2	2	1.33	
Christian	5	5	2	2	0	0	(df=4	0.857
Muslim	8	8	5	5	0	0	)	NS
6. Type of family	10	10	5	5	0	0		
Joint	58	58	25	25	2	2	0.423	0.809
Nuclear							(df=2	NS

							)	
7. Area of Residence								
Urban	15	15	5	5	0	0	0.89 (df=2)	0.641 NS
Rural	53	53	25	25	2	2		
8. Number of children								
One	51	51	18	18	1	1	2.96 (df=4)	0.564 NS
Two	14	14	10	10	1	1		
More than two	3	3	2	2	0	0		
9. Duration of IUD usage								
1-2 months	15	15	8	8	0	0	2.87 (df=4)	0.58 NS
2-6 months	23	23	10	10	0	0		
6-12 months	30	30	12	12	2	2		

*-P<0.05 ,significant and **-P<0.01 &***-P<0.001 , Highly significant

The above table shows that there is a significant association between the level of physical problems and their demographic variables Such as educational background at P<0.05 level and religion at P<0.01 level. Hence research hypothesis H_1 is retained for educational background and religion among mothers in association.

There was no significant association between level of physical problems among mothers and their demographic variables such as age, occupation, income of family, type of family, area of residence, number of children and duration of IUD usage.

4.5.2: Association between level of psychological problem and their selected demographic data.

Demographic variables	Mild (72)	Moderate(28)	Severe (0)	$\chi 2$	p-

	f	%	f	%	f	%		value
1. Age								
less than 25 years	45	45	15	15	-	-		
26-35 years	18	18	12	12	-	-	4.02	0.134
36-45years	9	9	1	1	-	-	(df=2	NS
							)	
2. Educational Background								
No formal education	6	6	4	4	-	-		
Primary education	22	22	3	3	-	-		
Secondary education	25	25	10	10	-	-	5.201	0.267
Higher Secondary education	18	18	10	10	-	-	(df=4	NS
collegiate education	1	1	1	1	-	-	)	
3. occupation								
Employed	22	22	8	8	-	-	0.037	0.846
Unemployed	50	50	20	20	-	-	(df=1	NS
							)	
4. Monthly family income								
Below 1000	16	16	4	4	-	-		
1000-2000	41	41	14	14	-	-		
2000-3000	6	6	4	4	-	-	2.59	0.458
Above 3000	9	9	6	6	-	-	(df=3	NS
							)	
5. Religion								
Hindu	59	59	21	21	-	-		
Christian	5	5	2	2	-	-	0.828	0.661
Muslim	8	8	5	5	-	-	(df=2	NS
							)	
6. Type of family								
Joint	10	10	5	5	-	-	0.249	0.618
Nuclear	62	62	23	23	-	-	(df=1	NS
							)	
7. Area of Residence								
Urban	17	17	3	3	-	-	2.09	0.148
Rural	55	55	25	25	-	-	(df=1	NS

							)	
8. Number of children								
One	55	55	15	15	-	-		
Two	15	15	10	10	-	-	5.82	0.05
More than two	2	2	3	3	-	-	(df=2	NS
							)	
9. Duration of IUD usage								
1-2 months	15	15	8	8	-	-		
2-6 months	23	23	10	10	-	-	1.21	0.54
6-12 months	34	34	10	10	-	-	(df=2	NS
							)	

*-P<0.05 ,significant and **-P<0.01 &***-P<0.001 , Highly significant

The above table shows that there is a significant association between the level of physical problems and their demographic variables Such as occupation at P<0.05 level and religion at P<0.01 level. Hence research hypothesis H_2 is retained for occupation and religion among mothers in association.

There was no significant association between level of physical problems among mothers and their demographic variables such as age, educational background, income of family, type of family, area of residence, number of children and duration of IUD usage.

CHAPTER V

DISCUSSION

IUD usage had been a widely accepted method of contraception among developing countries, including India. IUD usage which was once described as safe, economical and very effective, had been repeatedly questioned with its problems, particularly physical and psychological. Physical and mental strains related to IUD usage had a significant impact on the overall as well as the day today living pattern of the users.

This study was an attempt to assess the physical and psychological problems experienced by IUD users, using a descriptive research design. A semi-structured tool was developed drawing a neat separation of the two domains - physical problems and psychological problems of IUD users.

The data were-collected from 100 IUD users identified through convenient sampling, among mothers residing in selected areas at kannivadi primary health center. The authorities of PHC and VHN is a list of IUD users residing in their catchment area was collected. Employing the criteria for sample selection, the target subjects were approached door to door with the semi structured interview schedule and observation checklist.

Some of the **demographic characteristics,** which were significant, are discussed.

a)Age :

A majority of samples 100% using IUD is within 25 years of age. This shows that IUD had been widely accepted among the younger generation and most of the mothers are aware about early spacing of children. It also shows that an early marriage is prevalent among study samples.

b)Educational background:

Except a few (10%) all the samples were educated. The reason could be that they are living in an urban setup where education for women is given prime importance. Educational level affects the women's health care seeking behavior as well as the amenability to advice given. (Polit and Beck, 2010) .

c)Occupation :

The majority of 70% of the IUD users is economically poor because they are not employed.

d) Family income :

With the majority of the IUD users unemployed, they are economically poor. With the low family income they are potential targets for permanent family planning.

e) Religion:

Though all the study samples fall under a religion, 80% were Hindus. Religion was not a hindering factor in using IUD.

f) Type of family :

85% of the study samples lead a nuclear family.

g) Area of residence:

80% of the samples live in rural areas as this study was conducted in a village. Community health center covers mostly the rural areas and are covered by Government agencies or PHCs.

h) Number of Children:

Only 5% had more than 2 children. This shows that the family planning services and coverage had improved over the years. 70% used IUD as a temporary method for spacing children and 25% continues to use IUD. These 25% are potential targets who could be influenced for permanent family planning methods.

i) Duration of IUD usage :

A majority of the samples 44% are using IUD for not more than 12 months and none of the samples had used IUD for more than a year.

The first objective was to assess the physical problems experienced by IUD users:-

This study reveals the following:-

1. INFECTION:

a) Fever and Chills:

67% of IUD users studied had not suffered from any fever, and 33/o had suffered from fever with chills, which are suggestive of infection This finding collaborates the findings of Tietz's studies (1982), which suggests that in a total of 3,160 IUD removals 500 removals were accounted for infection related problems alone.

2. PAIN:

a) Cramping Pain:

67% of the IUD users had suffered from severe cramping pain. 22%of IUD users had suffered from moderate cramping pain. 20% of IUD

users suffered from minimal cramping pain, and only 42% had no pain. This shows that pain had been the commonest problems experienced.

b) Location, c) Onset and d) Duration:

57% of women studied had suffered from lower abdominal pain, and 42%from back ache. It was found that those who suffered from lower abdominal pain and backache had felt it acutely and these people constitute 58% of the IUD users.

Dr. Wastson Morr 2015 - discussing on the minor risk and side effect of IUD attributes that lower abdominal pain and backache are rarely present for more than the first week after the IUD's application. Women had also expressed that the pain was not very acute and persistent. None suffered from extreme pain.

3. PELVIC INFECTION:

a) Frequency of Urination:

It was found that only 5% had suffered from severe frequency of urination and 20% had experienced minimal frequency of urination and 65% did not have frequency of urination.

b) Burning micturition:

5% of women were found to have had suffered from severe burning micturition, 11% had suffered from moderate burning micturition and 18% had suffered minimal burning micturition. Few subjects attributed burning micturition to be the result of exposure to hot sun and sweating. They also said that the more they drink water to quench their thirst, the more they void. They do not correlate burning micturition with Urinary tract infection.

C) Dyspareunia:

It is found that only 1% had suffered extreme dyspareunia. 13% had suffered from severe dyspareunia and 33% had severe from moderate dyspareunia, 24% had suffered from minimal dyspareunia.

d) Vaginal Irritation:

3% of women had suffered from severe vaginal irritation, 10% suffered form deliberate vaginal irritation and women forming 5% had suffered from minimal vaginal irritation.

e) Vaginal Itching:

No woman suffered from extreme vaginal itching. 2% had suffered from severe vaginal itching, 10% had suffered from moderately vaginal itching, and 7% had suffered from minimal vaginal itching. Then again vaginal itching was attributed to poor personal hygiene by the samples of the study. 88% did not experience vaginal itching. It is evident of the fact that IUD insertion was sterile and PHC services are adequate.

F)Vaginal Discharge:

No woman had suffered from signs of extreme vaginal discharge27% had suffered from severe vaginal discharge, 34% had suffered moderate vaginal discharge while 19% had minimal vaginal discharge.

The above problem is suggestive of the PID. Hence those who had Complaints were asked to go to the center.

4. MENSTRUAL PROBLEMS:

a)Irregular menstrual Cycle:

No woman suffered from extreme irregular menstrual cycle. 2%had suffered from severe irregular menstrual cycle. 12% had under gone moderate irregular menstrual cycle and 10% had suffered from minimal irregular menstrual cycle. None suffered from menorrhagia (100%) .

b) Spotting:

It was also found that no woman had suffered from extreme or severe spotting in between menstruation, 3% had suffered moderate spotting and 4% had suffered from minimal spotting. Spotting which had been dealt as a major menstrual problem in many of the reviewed literature is found to be less predominant among the samples.

5. OTHER PHYSICAL PROBLEMS :

a)Uneasiness:

No woman had suffered from extreme uneasiness. 2% had suffered from severe uneasiness, l6% had suffered from moderate uneasiness and 22% had suffered from minimal uneasiness.

b)Loss of appetite:

No women had suffered from extreme loss of appetite. 9% had suffered from severe loss of appetite, 8% had suffered from moderate loss of appetite, 4% had suffered from minimal loss of appetite.

c) Weakness:

No women had suffered from extreme weakness while 12% had suffered severe weakness, 21% suffered from moderate weakness and 19% had suffered from minimal weakness. This finding supports the National Family Health Services kannivadi PHC (2010) , which states that a small percentage of 7% complained of general weakness.

d) Insomnia :

2% suffered from extreme insomnia, 7% had suffered from severe insomnia. 13% had suffered from moderate insomnia, and 16% had suffered from mild insomnia. Most of the mothers complained of insomnia, directly relating it to any feeling and fear of becoming pregnant. They questioned on and few demanded to the prescribed sleeping pills for the night. They directly related insomnia as the precedent cause of weakness and loss of weight.

e) Loss of weight:

No woman had suffered from extreme loss of weight. 9% had suffered severe loss weight, 10% had suffered from moderate loss of weight and 6% suffered from minimal loss of weight.

f)Weight gain :

No woman in the study had extreme (or) minimal weight gain. 7% had severe weight gain, and 5% had moderate weight gain. Though most of the samples complained of weight loss, it was novel to find that there were few who indeed gained weight. Weight gain had so for been cited and

criticized as a major issue only with the use of oral contraception. Weight gain with IUD usage could only be addressed as a predominant problem only if we could exclude all other weight gain influential factors.

None of the samples had suffered from pregnancy, ectopic pregnancy and perforation of the uterus.

Many of the above problems expressed should be ruled out as it could not be attributed to Copper 'T' insertion alone.

Assessing the degree of physical problems , the study revealed 68% IUD users experienced only a mild physical problem and 30% experienced a moderate physical problem. The physical problems were not severe in any of the subjects. Since the physical problems experienced by the IUD users are not severe, prevention and early identification can play a very vital role in eliminating the physical problems of IUD users.

The second objective of the study was to assess the psychological problems experienced by IUD users:-

This study reveals the following:-

I - FEAR:

(a) Fear of becoming pregnant even with IUD insertion:

17% had never had this fear. 62% had this fear at times. 57% had suffered this fear often and 10% had suffered this fear often and 5% had this fear very often. This fear of becoming pregnant even with IUD insertion was found to be predominant. A few complained that they were never reassured. Interestingly one neighbor of the sample said that even with her IUD she became pregnant, making the subject more anxious. But none of them became pregnant during IUD usage.

b) Fear of susceptibility for infections:

54% of women never had this fear,, while only 21% had this fear at times and 18% had often had this fear. With a thorough follow-up of IUD users and with regular checkup, the susceptibility for infection had been checked.

c) Fear of IUD expulsion (Copper 'T'):

20% had never had this fear. 18% had this fear often, while 20% had this fear often.

d) Fear of IUD entering into the abdomen:

39% had never had this fear. 10% have had this fear at times; supporting the fact they did not receive adequate information regarding IUD application.

II-PSYCHOSOMATIC DISTURBANCES:

e) Feeling of change in appetite:

39% never had this feeling. 34% felt change in appetite at times. 8% often felt a change in their appetite and 19% very often felt this change. This feeling of change in appetite directly influenced the mothers to eat less.

f) Feeling of losing weight:

48% had never felt loss of weight. 26% had this feeling at times. 20% had often felt this feeling and 6% had very often felt that they had lost weight.

g) Not active as before:

3% had never had the feeling that they are not as active as before. 12% have had this feeling at times. 60% have had this feeling often and 25% had very often felt that they were not active as before. This feeling made the mothers to feel weak and tired.

h) Decline in sexual interest:

25% had never had this feeling. 35% had this feeling at times. 25% had often felt that their sexual interest had declined. 14% have had this feeling very often and only 1% had always had this feeling. Without proper guidance and counseling the sexual libido of the mothers was found to be declining. Loss of sexual libido could attribute to various other factors and need not directly be related to IUD usage.

i) Feeling of anxiety of not be able to sleep properly:

50% had never felt this anxiety. 27% have had this anxiety at times. 20% had never under gone this anxiety. 2% had very often felt this anxiety.

III- OTHER PYSCHOLOGICAL PROBLEMS:

j) Feeling angry irrationally:

7% had never felt angry irrationally. 48% had at times felt angry irrationally. 38 % had often felt angry irrationally and only 7% had very often felt this way. Few of theirs complained that they were lately becoming short tempered and feel that they could not tolerate even small matters.

k) Feeling frustrated of having IUD all the time:

53% never had the frustration of having the IUD all the time. 25% had this frustration at times. 22% often suffered from this frustration.

l) Getting angry with the husband for lack of understanding:

40% never got angry with their husband for lack of understanding. 35% only angry with their husbands at times and 25% got angry with their husbands often.

Assessing the degree of psychological problems, the study revealed that 72% of IUD users experienced only a mild psychological problem and 28% experienced a moderate psychological problem. The psychological problems were not severe in any of the subjects. The reason for the presence of psychological problems could not be delimited to IUD usage alone. Counseling could be an active tool in the hands of health workers in preventing the psychological problems among IUD users.

After the identification of problems the researcher referred the mothers with, problems to PHC for follow-up and further guidance.

This study is in congruence with the conceptual framework and was able to bring out the existing physical problems and psychological problems faced by IUD users.

CHAPTER - VI

SUMMARY, CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS

This chapter deals with the summary of the study and conclusions drawn. It uses on the implications and gives recommendations for nursing practice, sing research, nursing administration and nursing education.

SUMMARY OF THE STUDY

A study to assess the physical and psychological problems experienced by the Intra-Uterine Device (IUD) users among mothers residing in selected areas at kannivadi primary health center in Dindigul district, was carried out of the following objectives:-

- To assess the physical and psychological problems experienced by IUD users.
- To find the association between physical and psychological problems of IUD users and their selected demographic variables.

Roy's stress adaptation model was tailored as the conceptual frame work for the study. This model basically outlines the perception of stress, its influence on an individual and the strategies for coping it.

This study was conducted by using descriptive research design at kannivadi primary health center in Dindigul district. All mothers who use any form of IUD device to prevent conception were considered as the population of the study. 100 samples who use IUD and who fulfilled the criteria were selected through convenient sampling. Data from these samples were collected using a semi structured interview schedule and an observational checklist to assess the physical and psychological problems experienced by IUD users.

After testing the validity and the reliability, the same tool was used for data collection.

The pilot study was conducted to find out the feasibility of conducting the study. Then the data obtained were analyzed to assess the applicability of the statistical methods. The areas and subjects of pilot study were excluded in the study.

The actual study data was collected over 6 weeks and the collected data were analyzed using descriptive and inferential statistics.

MAJOR FINDINGS OF THE STUDY:

Major findings related to physical problems among IUD users:

Of the various problems suffered by IUD users the following are note thy. Out of 100 women studied 34 (34%) women had suffered from burning micturition. 58 (58%) women had suffered from cramping pain. 57 (57%) women suffered from lower abdominal pain. 58 (58%)women had suffered from back 88(88%) women had acute onset. Similarly 88 (88%) women had suffered from pain on and off. 70 (70%) women had suffered from

dyspareunia. 24 (24%) out of 100 women had irregular menstruation. 40(40%) women suffered from uneasiness.52 (52%) women suffered from weakness. 38 (38%) woman had suffered from insomnia. 25 (25%) women suffered from loss of weight. 80 (80%) women had suffered from excessive vaginal discharge.

This study in assessing the degree of physical problems revealed that 68% of IUD users experienced only mild physical problem and 32% experienced moderate physical problem. The physical problems were not severe in any of the subjects.

Major findings related to psychological problems among IUD users:

83 (83%) women had the fear of becoming pregnant even with the IUD. 39 (39 %) women never had the fear of IUD entering into abdomen. 80 (80%) women have had the fear that IUD may be expelled. 61 (61%) women had a feeling of change in appetite. 97 (97%) women have had a feeling that they are not as active as before. 74 (74%) women had experienced feeling of declining sexual interest. 50(50%) women had experienced anxiety that they could not sleep properly. 69 (69%) women had admitted that they became angry irrationally. 60 (60%) women got angry with their husband for lack of understanding.

This study in assessing the degree of psychological problems revealed that 72% of IUD users experienced only mild psychological problem and 28% experienced moderate psychological problem. The psychological problems were not severe in any of the subjects.

There is a significant association between the level of physical problems and their demographic variables such as educational background at $P<0.05$ level and religion at $p<0.01$ level. Hence research hypothesis H1 is retained for educational background and religion among mothers in association.

There was no significant association between level of physical problems among mothers and their demographic variables such as age, occupation, income of family, type of family, area of residence, number of children and duration of IUD usage.

There is a significant association between the level of psychological problems and their demographic variable such as occupation at $P<0.05$ level and religion at $P<0.01$ level. Hence research hypothesis H_2 is retained for occupation and religion among mothers in association.

There was no significant association between level of psychological problems among mothers and their demographic variables such as age, educational background, income of family, type of family, area of residence, number of children and duration of IUD usage.

LIMITATIONS

IUD users come from a wide range of background and often had many physical and complex psychological problems. Some of these problems may date IUD insertion and others are consequences. Typical physical problems like pain, PID, menstrual problems, uneasiness, insomnia, loss of weight, and severe weakness.

Psychological problems on the other hand was expressed as unwanted fear of becoming pregnant, fear of expulsion of IUD, decline in sexual

interest, anxiousness and becoming angry irrationally. Some of these problems are short-lived whereas others are long lasting.

Physical problems could be dealt easily with constant medical checkup either an outpatient in a medical center/hospital or diagnosed early by VHNs during thevisits. On the other hand psychological problems are given less importance in guidance and counselling is recommended to be widely used before and after IUD insertion.

IMPLICATIONS FOR NURSING PRACTICE

- Nursing personnel should equip themselves in the early identification of physical and psychological problems of IUD usage.
- Nurses must have training on IUD insertion.
- Nurses working in the community setting should encourage the IUD users for frequent checkups.
- Nurses should update their knowledge and skill in performing basic counseling techniques.
- Nurses must provide health education on post care of IUD insertion.

IMPLICATIONS FOR NURSING EDUCATION

- In identifying the existing problems of IUD users, the nurse should be well oriented with adequate knowledge regarding expected problems.
- Though nursing curriculum involves the generalized concepts of counseling, it should be focused to explore skill and knowledge in specific areas, specific to problems of patients.
- The educational objective should be designed to meet the needs of health care system. Nursing education should give extensive training in the different techniques of counseling that could be included into the curriculum.

IMPLICATIONS FOR NURSING ADMINISTRATION

- Adequate nursing personnel should be employed in the community, who would identify the existing physical and psychological problems at a very early stage.
- Health education aids like charts, flash cards, flip charts, visual aids and puppets on this issue should be made available to community health workers.
- In-service and continuing education programs should be made feasible for nurses to update their knowledge and skill regarding the problems that an IUD user may face.
- Follow-up services should be strengthened.

IMPLICATIONS FOR NURSING RESEARCH

- Findings of this study will serve as a launching pad for further research in this concept.
- Findings of the study will highlight that research needs to address better technique of application of IUD and better material to provide side effect free contraception
- This study finding supports the fact that extensive research in this concept is needed to develop better strategies and better techniques of counseling to conquer the existing psychological problems of IUD users.

RECOMMENDATIONS

Based on the findings of the study, the investigator proposes the following recommendations:

- A similar kind of study can be conducted for a larger group for better generalizability.
- An extensive research can be done using more samples and for longer duration.
- A comparative study to assess the physical and psychological problems can be done among IUD users.

- A comparative study on the physical and psychological problems experienced by IUD users residing at kannivadi Primary Health Centre can be done.

TO CONCLUDE:

- IUD users are vulnerable to diverse physical problems
- Psychological problems should be addressed at all stages of IUD usage.
- Motivating the IUD users for regular checkup could prevent and tackle most of the physical problems.
- Counseling before and after IUD insertion is needed to neutralize the psychological problems.

REFERENCES

Book References:

- Polit,F.Denise and Cheryl Tatano Beck.,(2013) "nursing research",(9th edition), New Delhi; wolters kluwer (India) Pvt..Ltd,25-124.
- Savita Bansal, and suriya Bagum., (2012) "Midwifery and gynecological nursing" , (1st edition), New Delhi; s.vikas and company medical publisher (India) Pvt.. Ltd,163-167.
- Neelam kumari.,(2014) "A Text book of community Health Nursing – I" (4th edition) New Delhi; s.vikas and company medical publisher (India) Pvt. Ltd,629-667.
- K.Park, (2012) "Essentials of Community Health Nursing",(6th edition) Jabalpur; M/s Banarsidas Bhanot publishers (India) Pvt.. Ltd, 372-380.
- TNAI (2003) " A community Health Nursing Manual", (10th edition) , New Delhi; The Trained nurses association of India (India) Pvt..Ltd,179-194.
- Stan Hope And Lancaster;(1988) "Community Health Nursing", (2ND edition), USA; C.V Mosby company Pvt.Ltd,292-302.
- Myles,(2007), "Text book for midwives", (14th edition),Elsevier science publications (India) Pvt.Ltd, 502-585.
- D.C.Dutta,(2006) "Text book of obstetrics and gynecological nursing" (3rd edition),New Delhi; New central book Agency (India) Pvt.Ltd, 58-92.
- Annamma Jacob,Rekha.R,and Jadhav SonaliTarachand,(2015), "clinical nursing procedures: The art of nursing practice", (3rd edition), Bangalore; Jaypee Brothers Medical publishers (India) Pvt. Ltd, 577-580.

- Meggulanick and Judith.L.Myers(2015) " Nursing care plans",(8th edition) , USA ; Elsevier Mosby publications,863-905.
- Shebeer P.Basheer and S.Yaseenkhan,(2012), "A concise Textbook of Advanced Nursing practice", (1st edition) Bangalore; Emmess Medical publishers (India) Pvt.Ltd,439-453.
- BT Basavanthappa, (2007), "Nursing Theories" (1stedition), New Delhi; Jaypee Brothers Medical publishers (India) Pvt. Ltd, 24-27.
- Bharat Pareek and Shivanisharma,(2012)"A Textbook of introduction to Research,"(1st edition) New Delhi;S.Vikas and company Medical publishers (India) Pvt.Ltd, 1-224.
- P.SS.SundarRao,and J.Richard,(2012), "Introduction to Biostatistics and Research Methods", (5th edition)"New Delhi; Ashoh.k. Ghosh PHI learning (India) Pvt.Ltd, 100-218.
- BK.Mahajan,(2010), "Methods in Biostatistics",(7th edition), New Delhi; Jaypee Brothers Medical publishers (India) Pvt..Ltd, 1-266.
- GN Prabhakara ,(2006), "Biostatistics",(1stedition),New Delhi ; Jaypee Brothers Medical publishers (India) Pvt.Ltd,24-297.
- Nancy burns and Susan.K.Grove,(2012) " Understanding Nursing Research, Building An Evidence-Based Practice",(5th edition),New Delhi;Elsevier (India) Pvt..Ltd,144-531.

Journal References:-

- Indexed Rural Medicine,(2013) "Indian Journal of Rural Healthcare". OCT-DEC 2.1:51-59.
- Jima,(2003), "Journal of The Indian Medical Association",May101(5):305-307.
- Smith.T. and Kipnis.G.(2012). Implementing a postnatal mood and anxiety disorders program. MCN: "The American Journal Of Maternal / Child Nursing", May –June,37(2):80-85.
- MC Lemore M. and Levi A.(2011)."Journal of Obstetric and Gynecological Nursing", Jan 3.2: 672-677.

- "Journal of Nursing Perspectives"(2014),College Of Nursing, MTPG and RIHS, Jan-May 4.1:4.
- "Kerala Nursing Forum" (2015),May 5.1:44-59.
- "Nursing research Forum" (2015),April 2.2:15-19.
- Home visiting (2008) "Recent program Evaluation" (spring –summer) 9.1:44 -65.
- "Journal of women Health and Gender Based Medicine" July 8(6) 25-833.
- Contraception,(2015) " Evidence-Based Practise" June 8(6):53-55.
- Ajar(2015)"American Journal of obstetrics and gynecology", August 2013(2): 95-112.
- The medical management (2015), "American Journal of obstetrics and gynecology" August 42(1):84-95.
- The impact of post partum, (2015), "American Journal of obstetrics and gynecology", July 150(5) 34-43.
- Material-fetal medicine, 2015), "American Journal of gynecology", July 441(5) 34-48.
- Menstrual-preconditioning,(2015), "clinical Journal of gynecology" 43(1):123-130.
- The infectious Diseases society for obstetrics and gynecology (2015) "Journal of minimally invalid gynecology" July22 (3):191-193.
- Detroit MI (2015),"SMFM clinical guides clinical microbiology and infection,"21(1) 198-203.
- The impact of group on postpartum contraception,(2015),"Journal of adolescent gynecology", 51.4:210-233.
- Outcomes of contraception; (2015), "International Journal of obstetrics and gynecology," 213.2 208-300.
- Canadian society of pharmacology and therapeutics ;(2013), "Journal of vascular and interventional Radiology," 25(9): 85-99.

Unpublished thesis:

- Ratisuchithra (2007) a study to assess the physical and psychological problems of Intra Uterine Device (IUD) users among mothers residing in selected rural

areas, degree of Masters in Science of Nursing , Rajiv Gandhi University of Health Sciences, Karnataka.

- K.Nagamani (2009) a study to assess the physical and psychological problems of Intra Uterine Device (IUD) users among mothers residing in selected rural areas, degree of Masters in Science of Nursing , Rajiv Gandhi University of Health Sciences, Karnataka.
- Deepa K.Valenkar (2009) a study to assess the physical and psychological problems of Intra Uterine Device (IUD) users among mothers residing in selected rural areas, degree of Masters in Science of Nursing , Rajiv Gandhi University of Health Sciences, Karnataka.

Net References:

- About reiki [homepage on the Internet]; 2008 Available from : www.reiki.ca.last accessed: January 10, 2008.
- Awhonna et.al(2015) J Anaesthesiol clin pharmacol [Serialonline] 2015 retrieved from :http://www.joacp.org/text.asp?2015/29/4/119135.
- David L. Olds and Charles R.Hendarson (Recent program Evaluations) 2008 Available from : http://www. Jst or.org/stable /1602721.
- Julie schmittdiel, Joe v.selby,(Journal of women's Health &Gender –based medicine); 2004.Available from: liebert pub. com/doi/ abs/10.1089 / 152460999319147.
- YamazakiM,et.al,Mdlinx; 2015.Available from: Www.Mdlinx. com/ obstetrics -gynecology/print-preview. cfm/6268266.
- Roger, Mohammed Imtiaz, "American Journal of obstetrics and gynecology" , 2015.www.ajog.org.
- Linda D Bradley, Ndeye-Aicha gueye 2015. Received from: www.ajog.org/article/S0002-9378(15)00845-5/abstract http://dx.doi.org/10.1016/j.ajog.2015.07.044.

- Maria.I.Rodriguez, Richardchang, 2015. Available from: www.ajog.org/article/S0002-9378(15)00783-8/abstract. http//dx.doj.org/10.1016/j.ajog.2015.07.033.
- Daphnie Drassinower,sarah G.obican, 2015. Received from: http://dx.doi.org/10.1016 /j.ajog.2015.07.029.
- Ivo Brosens, Giuseppe Benagiano, 2015- Available from: http://dx.doi.org/10.1016/j.ajog.2015.07.021.
- Meghan M. Pearce, Krystal J. Thomas white "Journal of obstetrics & Gynecology". 2015. Received from: http: //dx.doi.org/10.1016/j.ajog.2015.07.009.
- Jack K.D. Sobel et.al, "Clinical microbiology and infection": 2015. Available from: http://dx.dor.org110. 10/6/j.ajog.2015.06.067.
- Urania Magriples et.al, "Journal of adolescent Gynecology", 2015. Available from: http://dx.dai.org/10.1016/j.ajog. 2015.06.066.
- Sarah H, Poggi et. al, "International Journal of obstetrics and Gynecology", 2015. Received from:www.ajog.org/article/S0002-9378(15) 00 712-7/abstract http://dx. Doi.org/110.1016/j.ajog. 2015.06.063.
- Priya Bapat et. al "vascular and International Radiology", 2015. Available from:http://dx.doi.org/10.1016/j.ajog.2015.06.065.

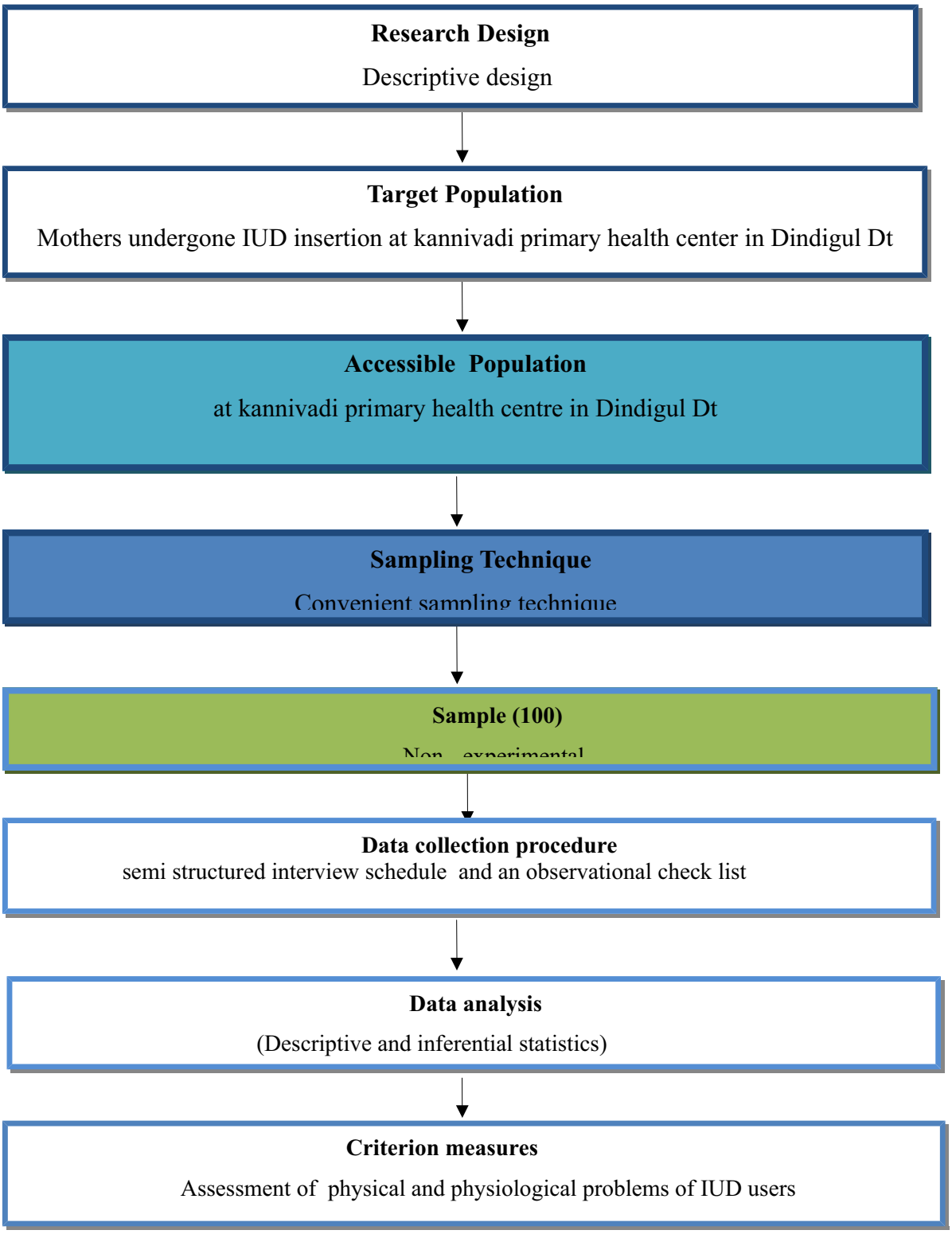


Figure :2 Schematic representation of the research methodology

APPENDIX-I

SAKTHI COLLEGE OF NURSING

(Approved by Govt. of Tamilnadu, Recognised by INC, TNC & Affiliated to Dr. M.G.R. Medical University)

Sakthi Nagar, Dindigul - Palani Main Road,
Palakkanuthu - (Po.),
Oddanchatram - 624 619.
Dindigul (Dt.), Tamilnadu.

Phone : 0451 - 2050272
Mobile : 97509 56810
Fax : 0451-2554317
E-mail : sakthinursingcollege@gmail.com

Dr.K.Vembanan, M.B.B.S., M.S.,
Chairman

PERMISSION LETTER

From

The Principal,
Sakthi College of Nursing,
Oddanchatram, Dindigul (Dt)

To

The Medical Officer,
Primary Health Centre
Kannivadi.

Respected Sir / Madam,

Sub.: Request for permission to conduct research study – reg.

MRS. NIRMALA .I is a bonafide M.Sc., Nursing student studying in our college. As a partial fulfillment of The Tamilnadu Dr. MGR Medical University requirement for the award of the M.Sc., Nursing Degree, she is undertaking (A STUDY TO ASSESS **"THE PHYSICAL AND PSYCHOLOGICAL PROBLEMS EXPERIENCED BY THE INTRA UTERINE DEVICE (IUD) USERS AMONG MOTHERS RESIDING IN SELECTED AREAS AT KANNIVADI PRIMARY HEALTH CENTRE"**), she has identified your centre as the best place to conduct the study.

Further details of the proposed project will be furnished by the student personally. She will not hinder your routine in any way and she will abide to the rules and regulations of the institution. All the information collected from institution will be kept confidential.

I kindly request you to grant her permission to conduct the study at your esteemed institution.

Thanking you,

yours sincerely,

Date : 2/7/15

Place : Kannivadi

from-email to Bro.

2/7/15.

Principal
Sakthi College of Nursing
Sakthi Nagar, Palakkanuthu
Dindigul - (Dist)
624 624

APPENDIX – II

CONTENT VALIDITY

From

Mrs.NIRMALA.I
M.Sc Nursing IInd Year,
Sakthi College of Nursing.
Oddanchatram, Dindigul.

To

Respected Sir / madam,

Sub:-Requisition from expert opinion and content validity reg.

I am 2nd year MSc Nursing student Sakthi College of Nursing Oddanchatram, Dindigul under Tamilnadu Dr.MGR Medical University.

As a partial fulfillment of M.Sc Nursing Degree program, I am conducting a research study. "A study to assess the Physical And Psychological Problems experienced by the Intra Uterine Device (IUD) users among mothers residing in selected areas at kannivadi primary health centre in Dindigul District".

I am sending the research tool for content validity and request you to give your expert and valuable review and opinion. I will be very thankful if you return at the earliest. Here with I have enclosed the necessary documents.

Thanking you.

Enclosed: Yours sincerely.

- Statement of the problem and objectives of the study.
- Tool for data collection with scoring key.
- Brief note on the research methodology and intervention tool .
- Certificate of content validity.

APPENDIX - III

CERTIFICATE OF CONTENT VALIDITY

T0 WHOM SOEVER IT MAY CONCERN

This is to certify that the tool prepared by **MRS.NIRMALA.I,** M.Sc(N) II YR student of SakthiCollegeof Nursing for the conduction of the study. " A DESCRIPTIVE STUDY TO ASSESS THE PHYSICAL AND PSYCHOLOGICAL PROBLEMS EXPERIENCED BY THE INTRA UTERINE DEVICE (IUD) USERS AMONG MOTHERS RESIDING IN SELECTED AREAS AT KANNIVADI PRIMARY HEALTH CENTRE IN DINDIGUL DISTRICT" is valid. She can proceed in conducting the data collection with it.

Place: **Signature**

APPENDIX - IV

LIST OF EXPERTISE

1). **Mrs.Ganga Eswari, M.Sc.,(N)**
Dept. of Obstetrics and gynecology,
Associate Professor,
Sakthi College of Nursing,
Oddanchatram.

2). **Mrs.Jemila Davidson. M.Sc.,(N)**
Dept. of Obstetrics and gynecology,
Associate Professor,
Global College of Nursing,
Nagercoil.

3). **Mrs. Susilet Thangam, M.Sc., (N)**
Dept. of Obstetrics and gynecology,
Associate Professor,
Annammal College of Nursing,
Nagercoil

4) **Mrs. Darling Kanmoni, M.Sc.,(N)**
Dept. of Obstetrics and gynecology,
Assistant Professor,
CET College of Nursing,
Nagercoil.

5). **Dr.S.Murugan, M.B.B.S.,M.D.,**
Medical Officer,
Primary Health Centre,
Kannivadi,
Dindigul District.

APPENDIX - VI

CERTIFICATE OF TAMIL EDITING

TO WHOMSOEVER IT MAY CONCERN

This is to certify the dissertation work **"A Descriptive Study to assess the physical and psychological problems experienced by the Intra Uterine Device (IUD) users among mothers residing in selected areas at Kannivadi Primary Health Centre, Dindigul District"** done by Mrs.Nirmala.I, II Year, M.Sc.,(Nursing) student of Sakthi College of Nursing, Dindigul District is edited for Tamil language appropriateness by S.DHANALAKSHMI, M.A., M.Phil., M.Ed., Ph.D

05.08.2015

SAKTHI COLLEGE OF ARTS & SCIENCE FOR WOMEN
ODDANCHATRAM
624 619

S. Dhanalakshmi

Signature.

Sakthi College of Arts and Science for Women
Sakthi Nagar, Palakkanuthu (Po),
Oddanchatram - 624 619, Dindigul Dist.

APPENDIX - VII

SAKTHI COLLEGE OF NURSING

CERTIFICATE FOR ETHICAL CLEARANCE

Committee members

Chairman

1. Mrs.Janahi Devi,
   M.Sc (N) in Paediatric Nursing,
   Principal, Sakthi College of Nursing

Members

1. Dr.Vembanan .M.B.B.S,M.S.,
   President,
   Sakthi educational institution.
2. Dr.S.Murugan
   M.B.B.S.,M.D.
   Block Medical
   Officer,Kannivadi
3. Mrs.Shoba.E.Merina,
   M.Sc(N) in Medical Surgical Nursing,
   Vice principal, Sakthi College of Nursing.
4. Mrs.Nithya Veni
   M.Sc(N) in Obstetrics and Gynecological Nursing
   Lecturer.
5. Mr.V.Palanichamy,
   B.A.B.L.,Advocate
6. Mr.Diaz Prabhakaran,
   M.A.,Sociology
7. Ms.Mariyammal,
   Ph.D.,Psychology

This is to certify that Mrs.Nirmala.I M.Sc.Nursing student , Obstetric and Gynecological Nursing, submitted a protocol on study as

A Descriptive study to assess the physical and psychological problems experienced by the intra uterine device(IUD) users among mothers residing in selected areas at Kannivadi primary health centre,Dindigul district.

The above protocol was received by ethical committee approved and mentioned that the study is feasible to carry out under the guidance of an eligible guide.

Signature of the Chairman

Principal
Sakthi College of Nursing
Sakthi Nagar, Palakkanuthu
Dindigul - (Dist)
624 624

APPENDIX - VIII

OBSERVATIONAL CHECK LIST TO ASSESS THE PHYSICAL AND PSYCHOLOGICAL PROBLEMS EXPERIENCED BY IUD USERS.

PART 1

DEMOGRAPHIC PROFILE

1.	Sample No	:	
2.	Age	:	
3.	Educational background	:	No Formal education / primary / Secondary /Hr.Sec / Collegiate
4.	Occupation	:	Employed / Unemployed
5.	Monthly family Income	:	below 1000 / 1000 - 2000 / 2000 — 3000/ >3000 Rs
6.	Religion	:	Hindu / Christian / Muslim
7.	Type of Family	:	Joint / Nuclear
8.	Area of residence	:	Urban / Rural
9.	No. of Children	:	1 / 2 / more than 2
10.	Duration of IUD usage	:	1 — 2 months / 2 — 6 months / 6 - 12 months.

PART II

1.	Where did you have your IUD inserted?	:	In Govt Hospital / PHC/ Private Hospital
2.	Who placed your IUD?	:	Private Physician / VHN / Staff Nurse

3. Do you go for regular checkup after IUD insertion? : Yes / No

If yes, how often : Once Every Month / Once in 2 Months / As and When need Arise.

4. Are you comfortable with your IUD? : Yes / No
   If No, The problem experienced is : Pain / urinary tract infection / Infection / fear.
5. Do you feel that this is the best choice of Contraception? : Yes / No.
6. Do you have any medical problem such as anemia or PlD for which you're undergoing treatment?
7. Did you have any problem during pregnancy?
8. Did you have any problem during delivery?
9. Was your menstrual cycle regular prior to IUD?
10. Do you normally have pain during menstruation even before IUD?

PART III

PHYSICAL PROBLEMS OF IUD USERS:

(immediately after IUD insertion only)

S.NO	PROBLEMS	EXTREME SIGNS	SEVERE s/s	MODERATE s/s	MINIMAL s/s	NO s/s
I.INFECTION						
1	Fever					
2	Chills					
3	Burning Micturition					

II.PAIN						
1	Do you experience pain?					
If Yes,						
a.	**The type of pain experienced is**					
	Cramping Pain					
	Throbbing Pain					
	Stabbing Pain					
	Radiating Pain					
	Location of Pain					
	Tenderness of Vagina					
	Lower abdominal Pain					
	Back Ache					

S.NO	PROBLEMS	EXTREME s/s	SEVERE s/s	MODERATE s/s	MINIMAL s/s	NOs/s
C	**Onset**					
	Acute					
	Chronic					
D	**Duration**					
	On and Off					
	Persistent					
III.PELVIC INFECTION						
1	Frequency of urination					
2	Burning Micturition					
3	Dyspareunia					
4	Irritation in Vagina					
5	Itching Vagina					
6	Excessive Vaginal discharge					
IV.MENSTRUAL PROBLEMS						
1	Irregular menstrual Cycle					
2	Spotting In Between Menstruation					
3	Menorrhagia					

V.OTHER PHYSICAL PROBLEMS						
1	Uneasiness					
2	Loss of appetite					
3	Weakness					
4	Insomnia					
5	Loss of weight					
6	Weight Gain					
7	Expulsion of Copper "T"					
8	Pregnancy					
9	Ectopic Pregnancy					
10	Perforation					

PART IV

PSYCHOLOGICAL PROBLEMS OF IUD USERS

S.NO	PROBLEMS	Never	At Times	Often	Very Often	Always
FEAR **Do you fear,**						
1	that you may become pregnant with IUD?					
2	that you may develop cancer?					
3	that you are susceptible for infections?					
4	that the IUD might be expelled?					
5	that the IUD may enter into the abdomen?					
PSYCHOSOMATIC DISTURBANCE						
1	Could you feel a change in your appetite?					
2	Do you feel that you have lost your weight?					
3	Do you feel that you are not active as before?					
4	Do you feel that sexual interest is declining?					
5	Do you feel very anxious that you cannot sleep properly ?					
OTHERS						
1	Do you feel angry irrationally ?					
2	Do you feel that you may become infertile permanently ?					
3	Do you feel frustrated to have IUD all the time?					
4	Get angry with your Husband for lack of understanding?					

Scoring Key

PART III

PHYSICAL PROBLEMS OF IUD USERS:

S.NO	EXTREMEs/s	SEVEREs/s	MODERATEs/s	MINIMALs/s	NOs/s
		II.PAIN			
		I.INFECTION			
1	6	5	4	1	0
1	6	5	4	1	0
2	6	5	4	1	0
3	7	6	4	1	0

III.PELVIC INFECTION					
1	6	5	4	1	0
2	6	5	4	1	0
3	7	6	4	1	0
4	6	5	4	1	0
5	6	5	4	1	0
6	7	6	4	1	0
7	6	5	4	1	0
8	6	5	4	1	0

V.OTHER PHYSICAL PROBLEMS					
1	6	5	4	1	0
2	6	5	4	1	0
3	7	6	4	1	0

IV.MENSTRUAL PROBLEMS					
1	6	5	4	1	0
2	6	5	4	1	0
3	7	6	4	1	0

PART IV

PSYCHOLOGICAL PROBLEMS OF IUD USERS:

S.NO	Never	At Times	Often	Very Often	Always
FEAR					
1	0	5	4	1	6
2	0	5	4	1	6
3	0	6	4	1	7
4	0	5	4	1	6
5	0	5	4	1	6
PSYCHOSOMATIC DISTURBANCE					
1	0	5	4	1	6
2	0	5	4	1	6
3	0	5	4	1	6
4	0	5	4	1	6
5	0	5	4	1	6
OTHERS					
1	0	5	4	1	6
2	0	5	4	1	6
3	0	5	4	1	6
4	0	5	4	1	6

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Å. ± ñ	À¢Ãî º ¨ É ¸ û	Á¢ «¾ ¢¸Å¡ É «È¢ Ì È ¢¸ û	«¾ ¢¸Á¡ É «È¢ Ì È ¢¸ û	Á¢¾Á¡ É «È¢ Ì È ¢¸ û	Ì ¨ ÈÅ¡ É «È ¢ Ì È¢¸ û	«È¢ Ì È ¢¸ û þø ¨ Ä
«.	¸¡ö Î º ø					
¬,	Ì Ç¢÷¿ Î ì ¸õ					
þ.	º¢Ú¿¦÷¸Æ ¢ì Ì õ §À¡Ð ±¡¢Î º ø					

<u>(2) ÅÄ¢:-</u>

«. ÅÄ¢ þÕó¾¾¡? :- ¬ õ ± ý È¡ø (1) ÅÄ¢Â¢ý Å ¨ ¸¸ û

Å. ± ñ	À ¢Ãî º ¨ É ¸ û	Á¢ «¾ ¢¸Å¡ É «È¢ Ì È ¢¸ û	«¾ ¢¸Á¡ É «È¢ Ì È ¢¸ û	Á¢¾Á¡ É «È¢ Ì È ¢¸ û	Ì ¨ ÈÅ¡ É «È ¢ Ì È¢¸ û	«È¢ Ì È ¢¸ û þø ¨ Ä
		4	3	2	1	0
«	Ì òÐÅÐ §À¡ ý È ÅÄ ¢					
¬.	ÀÃÅÄ¡ É ÅÄ¢					
þ.	« ÚôÀÐ §À¡ ý È ÅÄ ¢					

®	´Õ þ¼ò¾ ¹ø þÕóÐ Áü¦È¡Õ þ¼ò¾ü Ì ÀÃÅ¹ ²üÀ Î õ ÅÄ¹					

¬ ÅÄ¹Â¹ý þ¼í ¸û :-

		4	3	2	1	0
1	À¹ÈôÒÚôÀ¹ø ÅÄ¹					
2	« É ÅÂ¹üÈ¹ø ÅÄ¹					
3	ÓÐ Ì ÅÄ¹					

3. ¬ÃõÀ ¿¹¨Ä :-

		4	3	2	1	0
1	¾¹Ë¦ÃÉ ÁüÚõ Á ¹¾Á¡ É ÅÄ¹					
2	¿¡ûÀð¼ÅÄ¹					

4. ¸¡Ä « Å¸¡ºõ :-

		4	3	2	1	0
1	ÅóÐ Á ¨ È¾ø					
2	¦¾¡¼÷óÐ þÕò¾ø					

(þ) º¹Ú ¿Ã¸ À¡ ¨¾ §¿¡ö ¦¾¡üÚ :-

		4	3	2	1	0
1	« Ê ì ¸Ê º¹Ú ¿÷ì ¸Æ¹ò¾ø					
2	º¹Ú ¿÷ì ¸Æ ¹ì Ì õ §À¡Ð ± ¡¹Îºø					
3	¯¼ø ¯ÈÅ¹ý §À¡Ð ÅÄ¹					
4	À¹ÈôÒÚôÀ¹ø « ¡¹ôÒ					
5	À¹ÈôÒÚôÀ¹ø ± ¡¹Îºø					
6	« ¾¹ Á¡É Á¡¾Å¹¼¡ö					

<u>®. þÉô¦ÀÕì ¸ ¯ÚôÀ¹ø ²üÀÎõ À¹ÃîºÉ:</u>

		4	3	2	1	0
1.	´ Ø í ¸üÈ Á¡¾Å¼¡ö Í Æüº¼					
2.	Á¡¾Å¼¡ö ¦º¡ð Î ¦º¡ð¼¡¸À Î ¾ ø					
3.	« ¾¼¸Á¡¸ ¦Åû ¨ Ç ÁüÚõ þÃò¾ô§À¡ ì Ì À Î ¾ø					

¯.À¼È ¯ðº¡÷ó¾ À¼ÃîºÂ¨ É¸û:

		4	3	2	1	0
1	§¾¨ ÅÂ¼øÄ¡¾ ± ¡¼îºø					
2	À°¼Â¼ý ¨ Á					
3	§º¡÷×					
4	à ì ¸Á¼ý ¨ Á					
5	± ¨¼Ì ¨ È×					
6	± ¨¼² üÈõ					
7	¦ÅÇ¼§Â ÅÕ¾ø					
8	¸÷ôÀÁ ¨ ¼¾ø					
9	¸÷ôÀô ¨ À Ì Æ¡Â ¼ø ¸Õò¾¡¼ò¾ø					
10	¸÷ôÀô ¨ À Ì Æ¡ö ¦ÅÊò¾ø					

À Ì ¾¼ ®

1.¾ü¸¡Ä¼¸¸Õò¾ ¨ ¼ º¡¾É õ ÀÂý À Î òÐõ ±¾¼÷¦¸¡û Ù õ ÁÉ õ º¡÷ó¾ À ¼ÃîºÂ¨ É¸û:

Å.	À	´Õ§À¡Ðõ	±ô§À¡¾¡Å	« Ê ì ¸	Á	±ô§À¡Ð

± ñ	‰Ãî º ¨ É ¸ û	Åó¾¾‰ø ¨ Ä	Ð	Ê	‰¸ « Êì ¸Ê	õ
1	ÀÂõ					
«	¸Õò¾ ¨ ¼ º¡¾É õ ¦À¡Õò¾‰Ôõ ¸Õ×üÚ Å ‰Î §Å¡õ ± ý È ÀÂõ?					
¬	ÒüÚ §¿¡ö ÅóÐ Å‰Î õ ± ý È ÀÂõ?					
þ	¿‰Í ¸û ¦¾¡üÚ §¿¡ö ì Ì ¯ûÇ¡Å÷¸Ç ¡?					
®	¸Õò¾ ¨ ¼ º¡¾É õ ¦ÅÇ‰§Â ÅóÐÅ‰Î õ ± ý È ÀÂõ					
¯	¸Õò¾ ¨ ¼ º¡¾É õ ÅÂ ‰üÚ À Ì ¾ ‰ì Ì û ÅóÐ Å‰Î õ ± ý È ÀÂõ					

2. ÁÉõ º¡÷ó¾ ¯¼ø ¦¾¡ó¾Ã×:

«	À º‰Âø Á¡üÈõ ² üÀð Î ¯ûÇ¾¡?					
¬	± ¨ ¼ ¨ Â þÆóÐ Å ‰ð¼Ð§À¡ø ¯ ½ Õ ¸È÷¸Ç¡?					
þ	Ó ý Ò§À¡ø Í Ú Í Úô Ò þ ø ¨ Ä ± ý Ú ± ñ Ï ¸È÷¸Ç¡?					
®	¯¼ÒÈÅø ¬ ÷Åõ Ì ¨ ÈóÐ Å‰ð¼¾¡¸ ± ñ Ï ¸È÷¸Ç¡?					
¯	±¾÷À¡÷ôÒ ÁüÚõ ÅÂò¾ ‰É¡ø º¡‰Â¡¸ à í ¸ÓÊÂÅ ‰ø ¨ ÄÂ¡?					

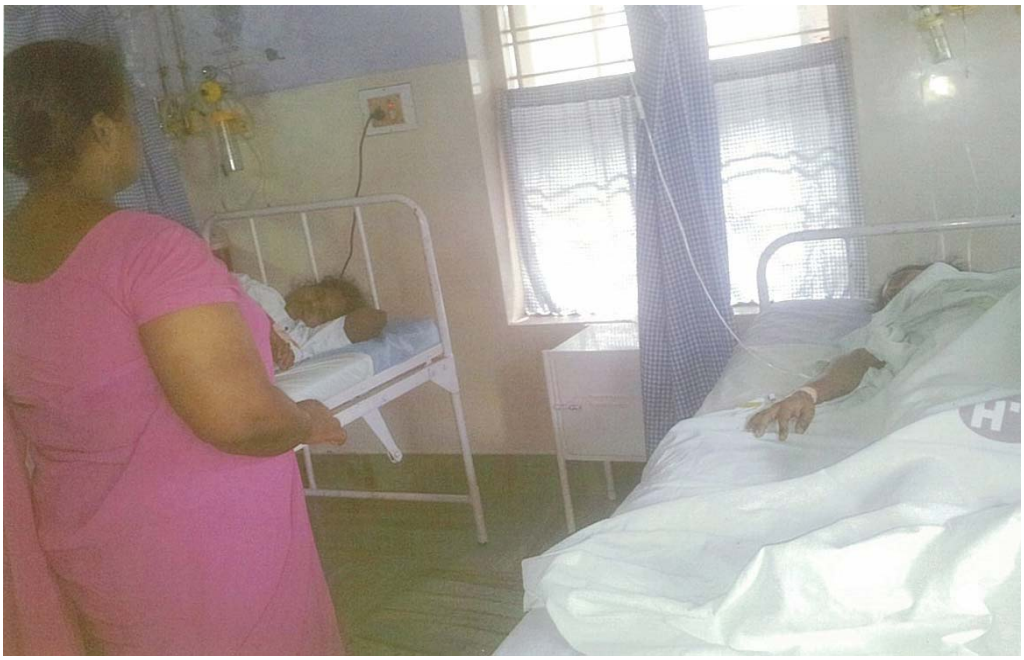
3.ÁüÈ ¨ Å:

Å. ± ñ	À Ãî º ¨ É ¸ û	´ Õ§À¡Ðõ Åó¾¾ ø ¨ Ä	Á¡¾Å ¼¡ö §À¡Ð	« Ê Ì ¸ Ê	Á ¸ « Ê Ì ¸ Ê	±ô§À¡Ð õ
«	¸ ¡Ã½Á øÄ¡Áø §¸ ¡Aõ ²üÀ Î ¸È¾¡?					
¬	¿ Í ¸ û ¿ÃÓ¾ÃÁ¡ ¸ Ì Æó ¨ ¾ ¦ÀüÚ ¦ ¸ ¡ û Ç ÓÊÂ¡Ð ± ý Ù ± ñ Ï ¸ È ¸ Ç¡? ¸					
þ	¸ Õò¾ ¨ ¼ º ¡¾É ò ¨ ¾ ±ô§À¡Ðõ ¦ À¡Õò¾ ¦ ¸ ¡ ñ Î þ Õôà¾¡ø §¸ ¡Àõ ÁüÚõ ±¡ Î º ø þ Õôà¾¡ ¸ ¯ ½ ÷ ¸ È ¸ Ç¡?					
®	« Ê Ì ¸ Ê ÅÄ þ Õôà¾¡ ¸ ± ñ Ï ¸ È ¸ Ç¡? ¸					
¯	¸ ½ ÅÕ¼ ý º ¡ óÐ ¦ ¸ ¡ û Ù ¾ø (« øÄÐ) ´ òÐ ¨ ÆôÒ þ øÄ¡ ¾¾¡ø §¸ ¡Àõ « ¨ ¼ ¸ È ÷ ¸ Ç¡?					

APPENDIX -X

PHOTOS

INVESTIGATOR ASSESSING PHYSICAL PROBLEMS OF IUD USERS



INVESTIGATOR ASSESSING PSYCHOLOGICAL PROBLEMS

OF IUD USERS